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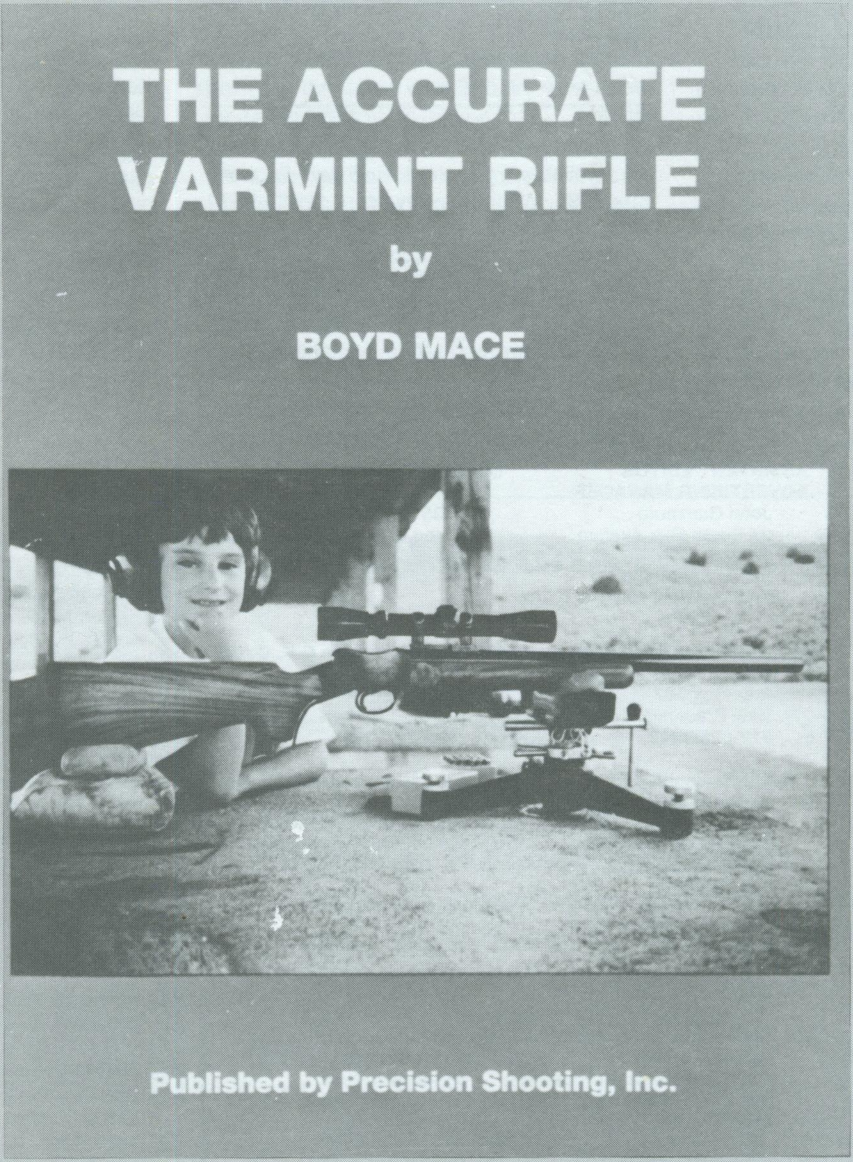
Precision SHOOTING

Dealing exclusively with the topic of extreme rifle accuracy



THE ACCURATE VARMINT RIFLE
by
BOYD MACE

Published by Precision Shooting, Inc.

HAVE WE GOT A BOOK FOR YOU!

THE ACCURATE VARMINT RIFLE

by Boyd Mace

186 Pages — 119 Photos

Now Available

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EDITORIAL

A small difference of opinion (on the Mid-East Peace Conference in Madrid):

"For the first time in a long time, there is an honest chance for peace in the Mid-East."
Opening speaker George Bush.

"Peace is possible, anything is possible, when people are willing to sit down and discuss their problems."
Following speaker Mikhail Gorbachev.

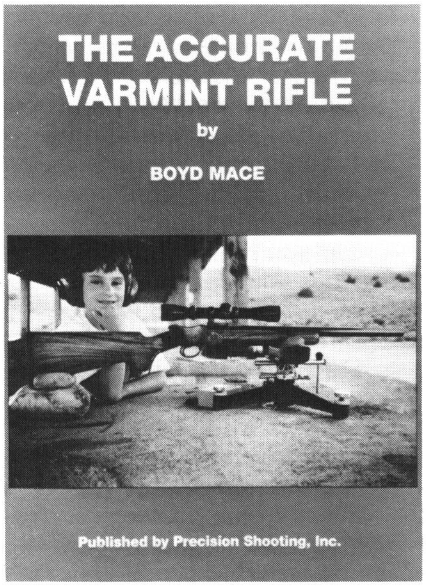
"Everyone attending the conference should be killed."
The president of Iran.

Here at the International headquarters of Precision Shooting, Inc., (the editorial offices are on the 40th floor . . . the top floor, naturally . . . of the Precision Shooting skyscraper that so dominates the Hartford skyline) we have been caught up in the enthusiasm that has accompanied the publishing of our first book, "The Accurate Varmint Rifle" by our own columnist, Boyd Mace. As this is written we will have the soft cover version ready for shipment on Tuesday, November 19th, with initial shipments to sources of the hardcover version on approximately December 1st. We wanted the book to be available in time for Holidays gift giving, and we were able to accomplish that objective . . . although there's probably a few people in the printing business around Elmira, New York who think a trifle ill of yours truly at the moment.

A book that has always been a major influence on the editor is "Twenty Two Caliber Varmint Rifles" by C.S. Landis . . . originally published in 1947 . . . and recently reprinted by Wolfe Publications. It has all the charm, mystique, and hokey of the genuine ENTHUSIAST. What a difference there is between the fellow who, in a dry monotone, recites the way to do this-or-that . . . and the fellow who gets up on a soapbox, waves his arms, and gets carried away on his topic . . . whatever the heck it might be. C.S. Landis could do it; so could Elmer Keith. On the other hand, some can carry it off without the enthusiasm . . . purely because their scope of knowledge on the topic of whatever they were discussing (in the firearms world) was so vast . . . that one had to recognize . . . "this guy knows what he's talking about, in spades". The late P.O. Ackley's early book "Handbook For Shooters And Reloaders" conveyed such an impression, as did certain of the writings of the late Townsend Whelen. Guns will come and go in your life . . . great barrels will eventually be shot out . . . that treasured hoard of virtually perfect bullets will eventually be exhausted . . . as will that lot of really hot H322 . . . or whatever. But when you find a really good book . . . don't part with it. Ever.

In next month's issue of Precision we will carry a major article, with a ton of photos, on bullet making . . . which will take the neophyte completely through the process. It is our honest opinion that after absorbing the article contents . . . even the assistant editor would be able to turn out a good bullet (note that the chance of the editor being able to do likewise were not mentioned). We will also

Continued on page 59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by
BOYD MACE
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by
BOYD MACE

186 Pages — 119 Photos

Chapters include:

Chapter 1 The Search For Accuracy
Chapter 2 Safety Issues and Horror Stories
Chapter 3 Accuracy Handloading Techniques
Chapter 4 Tuning and Troubleshooting Accuracy Problems
Chapter 5 Shooting Off The Bench
Chapter 6 Actions
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Chapter 12 Hunting Prairie Dogs
Chapter 13 Hunting Rockchucks
Chapter 14 Long Range Shooting
Chapter 15 Ballistics Discussed

Christmas Stocking Stuffer Options

by Rich Kayser

One of the most interesting (and educational) shoots I have ever made was the first one with Boyd Mace and Joe Kelly last year. I came away with the knowledge that Rockchucks could be hit at a half-mile, if a shooter could only assemble the components and have a chuckgun built to benchrest standards. Since then we have shot together and had a great deal of correspondence, both phone and mail. Boyd is one of those rare shooters who also possesses the talent to relate that information in an enjoyable manner to other people.

I had the privilege of reading the manuscript Boyd submitted to PS about eight months ago. He had talked with me, and done some work editing it after spending time here in Idaho shooting Rockchucks. It is a real work of art and science, and shows the results of many years of live varmint shooting. It amazes me the longrange shooting that somebody like Boyd can do, and the sophisticated level of his equipment. Unlimited-style benchrifles, chambered for high-capacity case .22 and 6mms. Boyd introduced me to Premier Reticle and the Multi-dot Reticle system for holdover shots.

Boyd tells me that PS has only planned an initial run of 3000 copies of "The Accurate Varmint Rifle". Of that 1300 will be the hardcover version, and the other 1700 will be softbound. He has also mentioned that he will have a few autographed copies for sale himself. With the thought that "firsts" of everything worthwhile sell fast, and become valuable; I would expect this book to be in short supply. It is, after all, Precision Shooting's first ever hardbound book offering; and Boyd Mace's first effort. Considering PS' current subscriber list only about one-half of you that get PS in the mail can have one of those limited first editions. I have mine, and you may not get one if you procrastinate. A word to the wise....

JERRY FAUL

(MARMOTA MONAX)

SOME HOLIDAY RAMBLINGS

Dear Dave:

I hope this reaches you in time for inclusion in the December issue of our esteemed journal of ultimate accuracy. For some time now, I've been accumulating little "wants and desires" that I wish would come true or were available for purchase. Some of these little items I think would be welcomed and used by some of our readers if they were just available. Others are just the hopeful wishes of one who would like to do better. So to eliminate my frustrations, or at least share them with you and our readers, I've composed a "wish list" in the form of a letter to Santa's chief elf — David Brennan.

Dear Santa's Helper,

Oh ye old Editor, I am a forty-three year old man that unfortunately has to work for a living instead of being able to shoot benchrest or varmints every day. I have been very good this year.

All I want for Christmas (in no particular order) is:

1. To become a columnist for PS magazine with my name up front with some interesting, inane title that no one understands what in the world it means. I'll settle for Marmota Monax.
2. For Remington Arms Co. to chamber the 220 Swift in its 700 BDL Varmint rifle with a stainless barrel.
3. For any U.S. ammunition manufacturer to offer 220 Swift ammunition with a 50 grain bullet at 4,000 fps and a 55 grain bullet at 3850 fps. (eat your hearts out 22-250 fans)
4. To have Leupold make its target scopes with 1/8 minute adjustments instead of 1/4 minute adjustments.
5. To have Leupold make a fixed 16x power varmint scope with target knobs 1/2 the size of its current huge, oversized, humongous knobs that may be wonderful on the bench but are a pain in the holster in the field.
6. For Remington to make its 6mm BR cases available .0060 to .0065 short.
7. To win the Super Shoot, the IBS Nationals, and the NBRSA Nationals all in one year.
8. To set a benchrest world record. (I'm not particularly fussy here, either IBS or NBRSA will do)
9. For Geza Nagy to give me the secret of shooting "the wall" at Central Jersey Rifle and Pistol Club.
10. For more shooters to participate in the Central Jersey Rifle & Pistol Club winter league registered 100 yd. score shoots. The Pres., Bert Rypkema, has done a tremendous amount of work building benches. We sure would like to see more happy faces on the line.

I know that you dear editor are all powerful and all knowing, at least more so than Charlie Brown's Great Pumpkin (yes, you are right dear fellow readers, I am doing a little suck up here) and if you just put your influence to work you can make some of my wishes come true.

I wish you and our readership the very happiest Holiday Season.

I'll let you know how the next trip turns out.

Jerry Wm. Faul

(Editor: Every now and then some character starts "campaigning" to become a PS columnist. They do it in different ways . . . some subtle . . . others less than subtle. I remember one fellow . . . by COMPLETE COINCIDENCE some six people . . . out of the blue . . . called me in a single week . . . all suggesting that I make so-and-so a PS columnist . . . his writing was that good (they said). All six of them, on questioning, swore up and down that there CERTAINLY was no campaign or organized plot afoot. I made the guy a columnist . . . if only to stop the phone calls. Now along comes Jerry Faul . . . and he goes beyond day to day chutzpah . . . he wants me to print his appeal . . . thereby probably bringing a letter campaign to my mailbox. I yield . . . see page two of this issue. Besides, he seems crazy enough to fit in around here all right).

LUBRICANTS AND THEIR PLACE IN BARREL BREAK-IN, CLEANING, AND LIFE EXTENSION

John J. Gammuto

BARREL BREAK-IN

Late last season, I began hearing some rather positive comments relative to the use of lubricants in barrel break-in procedures. Advocates of lubricants could be heard promoting wet, dry, and combinations thereof with equal vigor. This naturally peaked my interest, because I had never given it much thought. I did consider at one time trying Merrill Martin's "fire lapping" technique to iron out some rough spots in poor performing barrels, but never got around to it.

I don't care what some shooters may claim after reading this, I have never heard anyone, at least in the benchrest world, mention any lubricating medium in conjunction with barrel break-in. If there was someone out there doing it, they chose to keep it to themselves for one reason or another. Colorado's own Skip Otto was the first person to mention the subject to me. He deserves some credit for exhibiting a willingness to share information with fellow shooters. I admire that.

I have always used one of the well documented break-in procedures that precisionists ardently adhere to. Lubricants of any kind were never applied to the interior of my stainless "bored and scraped" rods. The only oils my bench gun barrels have come in contact with were those found in the chemical formulae of contemporary bore solvents.

Several lengthy articles and dozens of responses to shooter/barrelmaker questionnaires, specifically dealing with this topic, have been printed in the pages of this magazine. None, at least that I can find, have ever mentioned lubricants in this context.

A simplified version of the most widely known and accepted barrel break-in procedure is as follows. Clean the newly chambered barrel with your solvent of choice, fire one round and clean it again, keeping an eye out for green copper-wash on your cleaning patch. A **dark** green, almost blue colored patch could be viewed as a potential problem. 98% of the time (a "WAG" estimate) you can avoid disaster and overcome the accuracy robbing tendencies of barrel fouling by adhering to the "shoot one/clean one procedure", but there are **rare** exceptions. Once in awhile you get your hands on one that just does not want to conform to today's peak accuracy standards. Usually, a troublesome barrel will settle down after several of these one shot cleaning sessions. My best advice is not to give up on them too soon.

I have experimented with every solvent commercially available and even mixed a few up myself. As part of my standard barrel break-in procedure, I clean my new barrel with one of the chemical solutions specifically designed to attack copper, i.e., ammonia based. I realize there is no copper in an unfired barrel, but I prefer to use these solutions because they inspire more confidence that the job is complete. The ammonia based products have a tendency to attack the oils that seep into the grain of the steel in the manufacturing and chambering operations. For the record, I agree with the Editor's last published comments on the subject of cleaning, **you should be wearing rubber gloves** when handling any of today's bore cleaning solvents. The labels on all the cleaning products stress the effectiveness of the product to attack copper, lead, and even plastics. No mention is made of potential long term health risks. WEAR GLOVES.

On occasion, I have employed the one shot and clean, two shot and clean, three shot and clean method (up to a total of ten shots) and found it as effective as the one-at-a-time method. My approach to barrel break-in is almost always tempered by how eager I am to "see what that sucker can do." This is a shortcoming I have long been trying to overcome.

In any barrel break-in procedure, no matter which you choose, the key element is patience. Don't rush it. Consider it an essential "seasoning" process.

I have found, with a consensus of others whom opinions I respect, that many of the problems commonly associated with improper barrel break-in can be remedied by the use of friction reducing lubricants. Although many shooters now agree that properly applied lubricants do have a place in contemporary break-in procedures, a consensus has not been reached with respect to the most effective product. In other words, one fella is using Break Free CLP, while others are experimenting with such things as 2 cycle engine oils, and a host of highly refined special purpose lubricants. To show you one end of the spectrum, one guy I know is using trumpet valve oil. My choice, and the choice of several other friends of mine, is a new product called Friction Block. The 100% synthetic, non-petrochemical base, product runs off the scale with respect to all industry standard lubricity tests. I believe the fouling residues of petrochemical based lubes, although they work in barrel break-in, due to the limited number of shots required to complete the procedure, will ultimately fail if the user intends to also use these products to lube his bore in competition. A subject we will get into a little later on.

I previously used the phrase "properly applied" in conjunction with lubricants and their use in barrel break-in procedures. That should not have been taken to mean there is anything difficult or mystical about the procedure. You must begin by thoroughly cleaning the barrel. Remove all traces of oil, grit, and foreign particulate. When you are satisfied that you have accomplished this, it's time to begin the seasoning process by getting the lube where it will do the most good, deep within the grain structure of the steel. A light surface application will not serve our purposes.

If you wet a patch with Friction Block and use a speer-pointed jag, you can "work" the lube deep into the grain of the steel. You do not want to only give it a couple of quicks licks and start shooting. You want to deeply penetrate the steel and form a good base for the heat seasoning effect of the first shot. Use short, quick strokes of the rod to insure that the entire length of the barrel has been well lubricated. If you put a mark on your cleaning rod every inch or so you'll have a point of reference for this task. You don't want to neglect any part of the barrel. The muzzle must be as thoroughly coated as the area just ahead of the chamber. I do not believe it is necessary, or wise to coat the chamber with lubricants of any kind. Use a well designed and executed rod guide to protect the chamber from lubricants. Follow this procedure several times before firing the first shot. If you take my advise and try Friction Block, you'll find that it comes in two grades, light and heavy. Either product will do the job. In fact, you can mix the two if you find the heavier carrier more difficult to apply. I prefer to use the Light mixture in my bore and the Heavy (thicker) to lubricate my bolt. It is strictly a matter of personal choice. There is no difference in the essential chemical components of the two products, only the thickness of the medium that carries the lube.

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LUBRICATION AND PREVENTION
OF CONTAMINENT BUILDUP

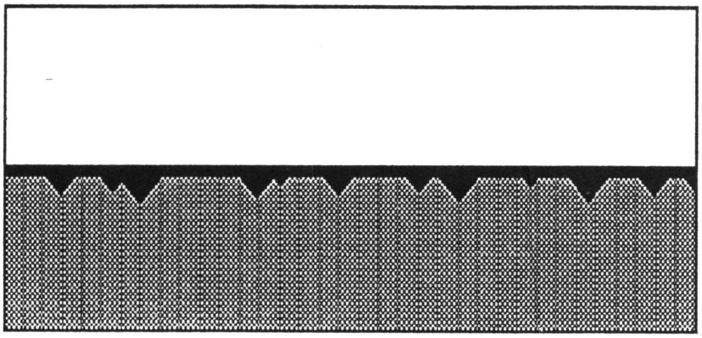


EXHIBIT 1

FILM BARRIER REDUCES
METAL-TO-METAL RESISTENCE

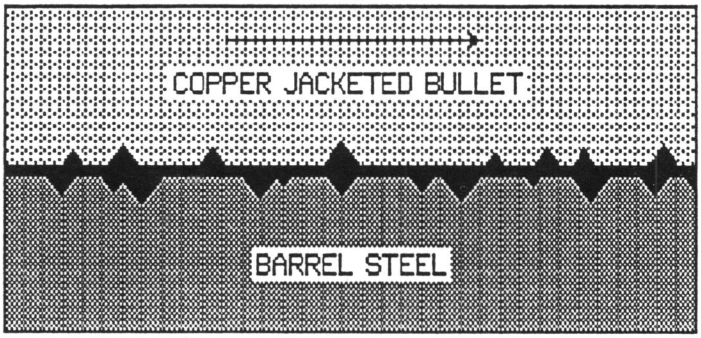


EXHIBIT 2

LUBRICANTS

Continued

After using the product, I believe you will be surprised to see that the first shot out of the barrel will not produce any significant traces of copper wash on cleaning patches.

Graphic 1 illustrates how lubricants penetrate steel. As pointed out earlier, the thin lubricating film not only acts as a lubricating medium, but it also seals the steel off from foreign particulate and moisture.

Another reason why I prefer Friction Block to the other lubricating products is the fact that it does not occupy unnecessary space between friction plate surfaces. (See exhibit 2). In other words, it does not contain additives like powdered graphite or teflon. Dry lube additives, with respect to grain size, can have a significant effect on critical dimensions such as pressure ring to bore contact.

CLEANING AND BARREL LIFE EXTENSION

Exhibits 3 & 4 show how the anti-friction tendencies of lubricating mediums lessen metal-to-metal resistance by keeping the barrel steel clean and lubricated. My own experiments would seem to substantiate the claims that lubricants not only have a place in today's break-in procedures by shortening the process, but they also substantially reduce the number of cleaning sessions required and extend barrel life by diminishing wear. That is to say that, if you don't want to, you don't **have** to clean every 10-15 rounds.

I have proven to myself that as many as 40-50 rounds can be fired through a barrel without having to run so much a single patch through the barrel using Friction Block. The remarkable thing in all of this has been the fact that accuracy, measured in 5 shot groups at 100 yards, did not drop off. The first time I saw this for myself was at a benchrest match in Connersville, Indiana late this season. Ray Eichenlaub, of Cincinnati, Ohio, only cleaned his barrel once at the outset of the match with Shooters Choice Black Powder Gel. He followed his cleaning routine with a patch of Friction Block and then followed that with a patch impregnated with Molibdium Disulfide. Fred Hasecuster does something similar, but substitutes powdered graphite. Fred told me recently that he has been breaking-in barrels with graphite for years. Since lubricating his bore with the powdered graphite, he has noted that his barrels have not fouled since. Barrelmaker Ron Pence is one of the fellas experimenting with 2 cycle engine oil to lubricate his bore. I have to admit, I have never seen Ron shoot as well as he did in Connersille late this season. He posted a couple of rather impressive sub-eighth minute groups.

The barrel I used to conduct my own tests with did have a serious tendency to copper foul. In fact, I had almost given up on it completely. I tried everything I could think of to make it work. After as few as 7-10 rounds the barrel would collect so much copper it looked like the inside of a copper tube. The only thing I didn't do to that barrel was have it exorcized.

After countless hours of soaking and patching with a Dewey Cleaning Rod, topped off with one of Davey Wick's superior jags, I was able to get the barrel cleaned to my satisfaction. I scrubbed 5-6 patches soaked with Friction Block through the bore and then let it sit there for several days. My intention was to "rebreak-in" the barrel, if possible, and then proceed with the rest of the experiment.

The next time I could get away from the office was about a week later. The Friction Block had been in the barrel the same amount of time. When I patched it out, minute traces of some unidentified particulate appeared on the first patch. It was flake-like

PENETRATION OF METAL AND
CONTAMINENT BREAKUP

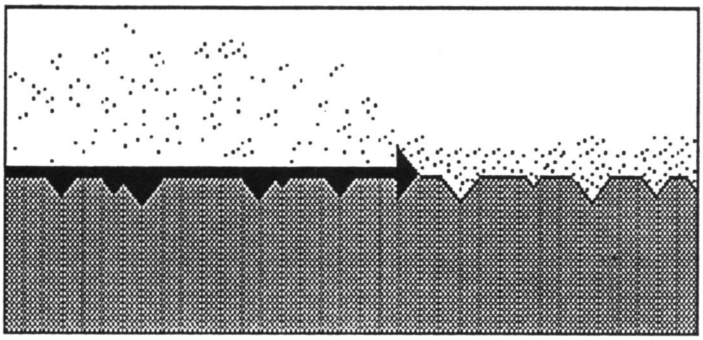


EXHIBIT 3

REDUCTION OF
CLEANING FREQUENCY

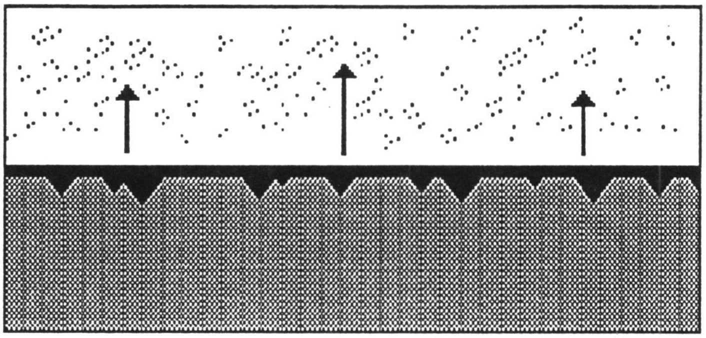


EXHIBIT 4

ACTION
FRICTION
BLOCK
The Ultimate Anti-Wear System
Dramatically Reduces Friction and Drag
Improves Accuracy
Repels Moisture and Dirt
Works In Extreme Temperatures
BLOCK
The Ultimate Anti-Wear System

and black in color. My guess is that it was carbon that had seated itself deep within the grain structure of the steel. I lost interest in it after I convinced myself that it was not a piece of rifling, or anything else of consequence. I believe that the deep penetrating effect of the lube caused the small flecks of carbon to float to the surface of the steel where they could be removed with a patch.

I blame the old, less effective break-in procedure on an era where ignorance and misinformation ruled. The notion that barrels must be dry, or minimally wet when the first shot is fired has retarded our progress and diverted our attention to other less meaningful areas of concern. In my opinion, the positive effects of lubricating the bore prior to the first shot can not be overstated. How we overlooked this for all these years is beyond me.

Back to the procedure - after applying Friction Block and running one patch through the bore, I chambered one up. After firing the single shot, I pushed a patch soaked with one of the ammonia based solvents down the bore to see if any copper had adhered to the bore wall. Nothing. Not even a small trace of green could be detected on 6 or so patches pushed through the bore in 7 minute intervals.

I repeated the same procedure 4 times until I was satisfied the barrel had been cured of its tendency to foul. It was at this point that I began shooting 5 shot groups.

To avoid unwarranted criticism (I get enough of the warranted variety), I want you to know that I did not down-load the cartridges to achieve these results. I fired the same rather "warm" load through the barrel as I had on previous occasions. I patched the clean bore with Friction Block and ran one down her throat just to wipe away any excess material that may have collected on the surface of the steel.

One of the first things I noticed was the fact that the fouling shot (cold barrel) printed in the same spot as successive shots. This, in the past, has always indicated to me that the barrel is ready, willing, and able to shoot with the best of them.

After shooting a half dozen or so 5 shot groups and doing nothing more than patching the barrel out with several applications of Shooters Choice Black Powder Cleaning Gel, I was convinced that I was on to something. I like the fact that the gel clings to the walls of the bore and it does not gravitate and collection on the bottom. You get a more uniform cleaning action from the jelly-like material than you do from the free flowing liquids.

I thought I'd take the friction reducing product one step further by "cleaning" the barrel with it between 10 shot groups. I was amazed to discover that after 100 bullets, i.e., 10-10 shot groups, it was still shooting quite well. So as not to cause confusion, my definition of "quite well" is anything in the low 2's (.2XX").

I'd like to stress the fact that these results are only possible if the barrel has been seasoned properly with Friction Block, because it will not work on a barrel that copper fouls. There is no chemical agent in the Friction Block product that attacks copper. It will float carbon particulate to the surface of the metal, but it will not attack and dissolve imbedded copper.

In summary, I intend to carry this experiment as far as I am able, with the resources at hand. With respect to barrel break-in, I am content using the Friction Block product by itself, i.e., without other dry lubricating additives. It does a fine job alone. I have a higher degree of confidence in this products ability to do the job than I do with petrochemical based preparations.

Bore cleaning is another topic completely. What the best approach to cleaning with respect to this product is, I'm not sure. More tests will need to be conducted to confirm this products ability to do it all.

Anyone that has experimented along these lines is invited to contribute to the discussion.

John J. Gammuto

Friction Block is a patented product manufactured by Action Products, Inc., 22 North Mulberry Street, Hagerstown, MD 21740. You may have some difficulty obtaining the product from local suppliers until next spring. It's that new. The folks at Action Products may be able to help you locate a stocking retailer. Drop them a line.

DISPLACEMENT OF WATER AND CORROSION PROTECTION

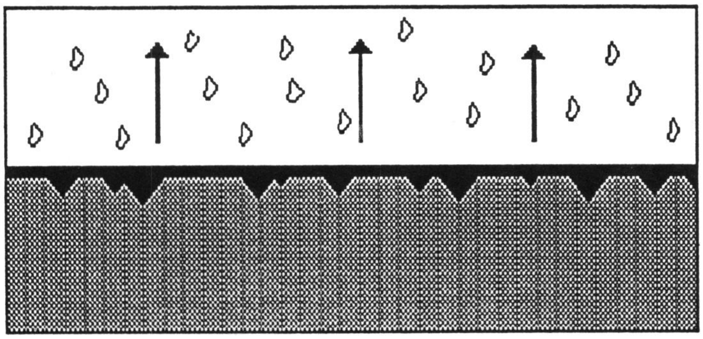


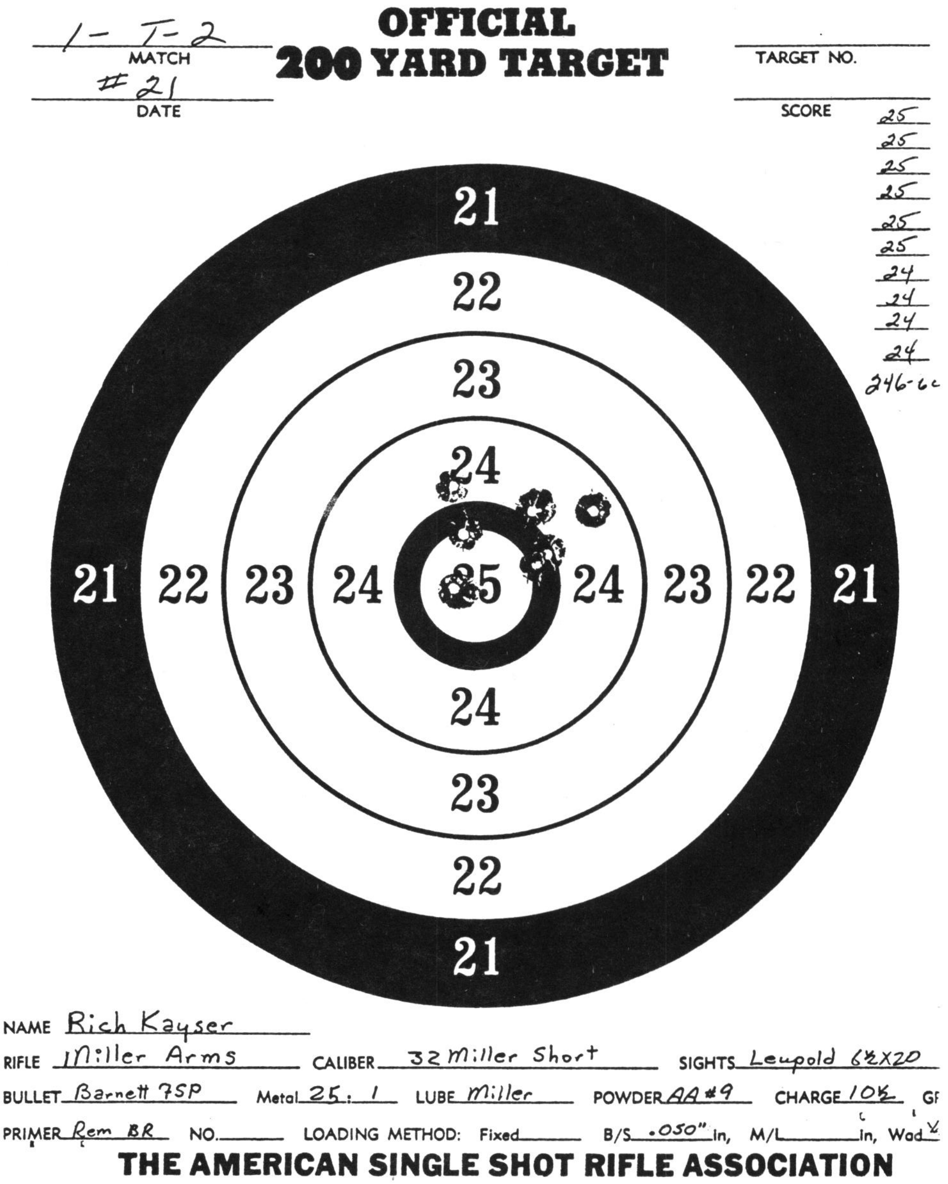
EXHIBIT 5

At The End of The Yellow Brick Road...

by Richard Kayser

I racked my brain looking for a catchy title and ending to this series on Schuetzen Rifle shooting and what to expect the first year. It was a good year, and I think I have a basic handle on what is necessary to shoot and be competitive in the game. Those two concepts shooting, and being competitive are not always synonymous, especially in the ASSRA/Coors matches. A large percentage of the competitors at the Regionals and at Golden were not there with any expectation of winning. They just wanted to improve on last year's score and talk singleshot rifles with kindred souls.

I had a rather steep learning curve this freshman year, and expect to improve a lot during 1992. I did make "B Squad" two of the four matches at the Coors Nationals, and "C Squad" the other two. A lot of people helped me in the search for Schuetzen competence, and I would like to take a line or two to thank them.



OFFICIAL
200 YARD TARGET

MATCH 1- T-2
DATE #21
TARGET NO.
SCORE 25
25
25
25
25
25
24
24
24
24
246-6c

NAME Rich Kayser
RIFLE Miller Arms CALIBER 32 Miller Short SIGHTS Leupold 6½X20
BULLET Barnett 7SP Metal 25 : 1 LUBE Miller POWDER AA #9 CHARGE 10½ GR
PRIMER Rem BR NO. LOADING METHOD: Fixed B/S .050" In, M/L In, Wad ✓

THE AMERICAN SINGLE SHOT RIFLE ASSOCIATION

Dean and **Cherie Miller** of **Miller Arms**, and their son **Cyle** are at the top of the list. Dean took time to talk with me about all the aspects of Schuetzen rifle shooting; casting good bullets, lubing them, making cases, everything I needed to learn to make a decent showing. He and Cyle built me a rifle that I can win with, when I get my act together. Rome wasn't sacked overnight, but I have high hopes for down the road.

Dave Purcell was the cause of all this, letting me shoot his rifle at the '90 Tacoma Regional. That 247-7C was an accomplishment I want to repeat under match conditions. Thanks, Dave.

Jim Feren has won the Coors National Schuetzenfest for seven straight years now, and presents a high-profile target to aim at. He is a soft-spoken gentleman, a fierce competitor and a shooter that is wor-

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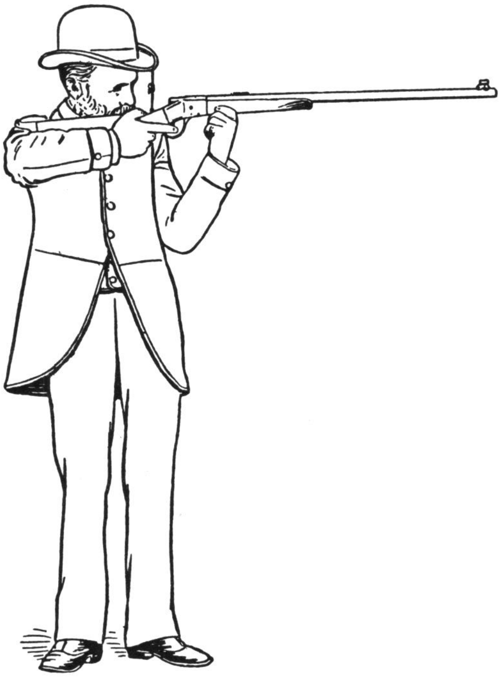
thy of the title Champion. His offhand skills are hard to match, and his consistency has kept him at the head of a cadre of Schuetzen Riflemen for a long time. He is free with advice to newcomers and it is hard-earned knowledge, not speculation.

George Valuck and the **Adolph Coors Company.** The Coors company has sponsored these matches for ten years now, and expanded them to include Canada as well as the continental U.S. George and the staff scour the industry to provide prizes and sponsorship for the matches. They can't be getting a big return on this, there aren't enough people in the game to allow that. They do enjoy the Schuetzen-type of rifle competition, and that must be enough. It is a wonderful thing for those of us involved, and I wish Coors well. I know what kind of beer we drink at my house. Support those who support shooting.

I closed out the season on September 22nd where I started this journey, at the Tacoma Rifle and Revolver Club Range. Bill Crane and the Tacoma Club host a two-day fall Schuetzenfest. There is a unique match in Schuetzen shooting, their answer to the "IronMan" competition. 100 Shots, Offhand, any sights. I did not contest the Offhand 100, with only one day to spare I had no time. Next year.... Matches 1-4 were the traditional Scope and Iron sighted Bench and Offhand 10-shots per target.

As might be expected, my sole claim to fame was the scope bench match. I caught a condition and put my ten shots downrange in about four minutes. The last two were a bit high, a slight tailwind got me. The first and sixth "leaked out the top" a bit as well, but the group would have won the small group award. As it is, I shot a very tidy 246-6C. That group measures 1.4″, just small enough to have fit within the 25-ring if I had centered it properly. As you can see, I am making better bullets. Unfortunately, that 246 only tied me with Tommy Mason and his 7C on the tie-breaker nudged me into second-place in the match.



Tom experienced a mild cerebral hemorrhage on his first shot and fired a 23, but recovered nicely to finish with a 246-7C and win. He is, as some of you may recall, a stockblank supplier for the Hoch actions (and nearly all of the other single shot rifles as well). His allround shooting skills showed this weekend with a third-place overall finish.

Schuetzen rifle shooting places a premium on all a rifleman's skills, since the overall winners have to be able to shoot both offhand and from a bench, with either iron or scope sights. The offhand portion has been my downfall this year. Those skills come slowly, with practice. I have too many shooting interests (a jack of all trades as it were) to excel in any one. A cross I try to bear.

It is interesting to note, however, that the basic gunhandling skills and wind/mirage doping that I have learned shooting Rockchucks have helped me in Hunter Class and now the Schuetzen competition.

Now, to convince my wife that I need a good Stevens 44 22RF Schuetzen rifle for the 22 matches. Of course Tommy Mason just picked up a nice Winchester HiWall Schuetzen 22, and Dean Miller has built a few 22RF actions....

We have come to the end of the "Yellow Brick Road" and the basics of Schuetzen Rifle shooting. The road never actually ends, we just come back full circle to the starting point. A little wiser, perhaps, but ready to make the journey again in the spring. It may be more of an annual pilgrimage than a journey. At any rate, the walk was fun with good company and prime entertainment.

Seasons greeting to all of you from Lorene and I and see you next year at a rifle match somewhere.

Rich Kayser

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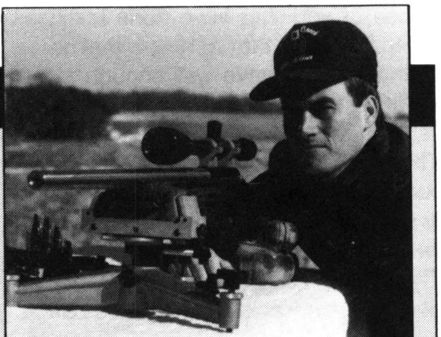

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Jack Sutton of Hart Rifle Barrels, believes in that philosophy both in his barrel making and in the products he uses.

He didn't choose his Redding powder measure by accident either. The Redding #3BR Match Grade Powder Measure allows demanding shooters like Jack Sutton to achieve unparalleled precision and repeatability right out of the box with no modification whatsoever.

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DICK WRIGHT

Dear David;

I'm afraid this is a good news/bad news letter. Bad news first . . . the job of assistant editor for Precision Shooting will be open very shortly. Now, the good news is . . . if you can't find a more qualified applicant; I would be delighted to take the job. A really traumatic thing happened to me last night, David. About 10:30 PM, I got a phone call asking for "Dicky" and wanting to know if I still had the Wilson 22-250 dies I had advertised in the Trading Post of your current issue. I quickly concluded the phone call and dug up the newly arrived issue. Sure enough . . . right at the top of the third column, page 58, was my ad, just as I wrote it, except . . . it contained the dastardly word "Dicky".

A little background is necessary at this time. I grew up a really small and scrawny kid called Dicky. I hated the name, but wasn't big enough to do anything about it. However, during my freshman year of college, I quickly grew to 6′2″ and 185 lbs. By the time I was a sophomore, the only person still calling me "Dicky" was my father. About this time, I started to realize what a seriously cool person I was and, finally, convinced the Old Man that, while I loved him dearly, if he didn't stop calling me "Dicky", I would be forced to rearrange his structural integrity. He stopped and for years I have been free of the hated "Dicky".

Given the above, you can imagine my ire and bewilderment when I got a phone call in the middle of the night asking for "Dicky". David, you have my word that the above obnoxious word was not in the ad I submitted to the Assistant Editor. I can only guess he put it in after reading a brief comment I made about "the humble, unassuming assistant editor of a prominent benchrest publication". Seems to me, this represents not only a gross abuse of the editorial power given this person, but also, a serious ignorance of history and the lessons it teaches us.

David, it's been almost 2000 years since anybody of Italian extraction seriously p--- off one of us German folks and didn't end up conquered and colonized. Knowing what a bright and educated fellow the assistant editor is, I can't imagine why he would dare to do something like this, unless . . . HE WANTS TO BE THE FIRST PERSON EVER IN THAT THINNEST OF BOOKS, "Italian War Heros".

I really like the assistant editor. He makes a major contribution to our sport with his excellent technical articles. He is fun to shoot with and a very good loser . . . course John has a lot more experience at the latter than most folks. In the hassle and general busyness of a benchrest match, it lightens things up to see John loading cases filled with muddy water and shooting himself in the leg with a primer. Kinda the Clown Prince of Benchrest.

However, this time he went too far.

I think I will kill him. (Editor: fine by me).

Have a nice day,
Dick

SINCLAIR DOES IT AGAIN

John Gammuto

Sinclair International, a successful business built on hard work and a knack for anticipating the needs of precision reloaders, has once again outdone itself. Three successful and highly "workable" tools have significantly been re-designed to meet the demands of today's handloaders.

Those of you that have done business with Mr. Sinclair in the past know that he is a man that cannot leave well enough alone. Contrary to most people's experience in this area, he succeeds.

Three large ads placed in this issue proudly announce the firm's latest offerings. You only need to see photos of them to be convinced that they are indeed "improved".

The design parameters of the Concentricity Gage, the Neck Wall Thickness Gage, and the Phase II Neck Turning Tool have been changed so radically that they seem to demand special consideration. The next time you find it necessary to select and "prep" some cartridge cases you're going to be reminded of these tools, and how they could help lessen the often burdensome tasks associated with the effort.

The Concentricity Gage's value is the fact that it allows you to check fired, resized, and loaded rounds for concentricity (roundness). The gage for all practical purposes has no limits. You can accurately measure cartridges up to, and including the .460 Weatherby.

The Sinclair Neck Wall Thickness Gage is a practical and time saving device designed for the reloader looking for upper limit accuracy from his equipment. I use this tool to pre-select all cartridges prior to shooting them in my rifles. It does not matter whether the rifles are of the high grade benchrest variety, or factory models. I want to know what I'm putting in that chamber and what to expect in terms of accuracy.

Thin-walled cartridges do not serve our accuracy needs. A non-uniform wall thickness, among other things, creates an off-center powder column within the cartridge. Measuring the neck wall thicknesses of new lots of cartridge brass is a good habit to get into. Chances are if the necks are uniformly thick, the bodies will be too.

The Phase II Neck Turning Tool, my personal favorite, is one of the finest special purpose tools ever designed for handloaders. The outside neck turning tool has completely been re-designed to accept a dial indicator. Those that find it necessary to make corrections in increments of .0001″ will really like this tool. The set adjustments and lock-up features have been reviewed and modified to insure confidence and reliability. Mandrels are available for all popular diameters.

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Look for all three Sinclair International ads in this issue for further details and ordering instructions.

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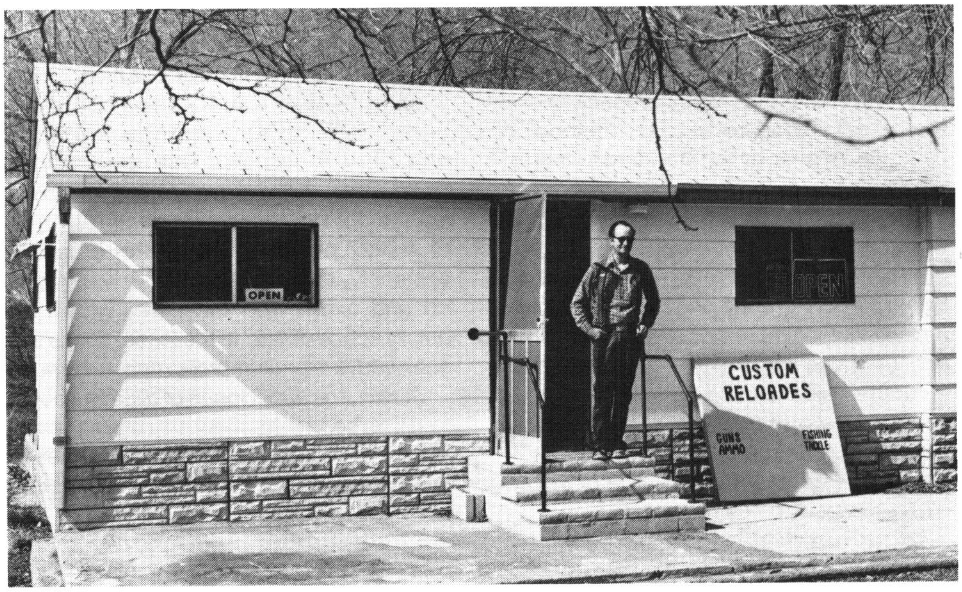
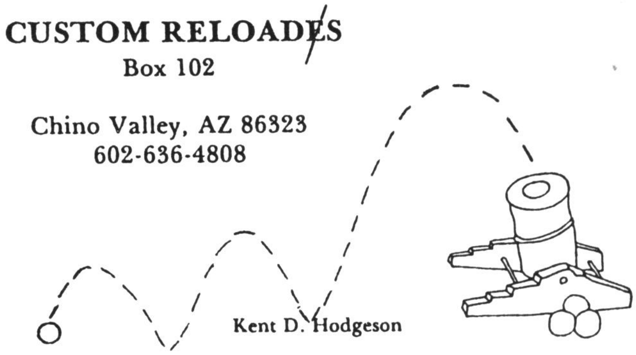
I HAVE TO GET MORE OF THIS POWDER INTO THESE CASES!

by

Karl Bosselmann




CUSTOM RELOAD~~E~~S
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Chino Valley, AZ 86323
602-636-4808

Kent D. Hodgeson

Kent Hodgeson, owner/operator of CUSTOM RELOADES (now retired). Notice, please, that I did cross out some of the letter E's . . . neither Hodgeson's sign maker nor printer knew how to spell 'reloads.'

Dilemmas.

Life abounds with them. Most everyone's life abounds with them. They sneak out from behind little trees and rocks, even sandhills and shadows. They dig and gouge; frustrate and confound. They are the unseen ticks, flies, and rashes of fungi that attack mental well-being. A crafted set of decisive tools belonging to the Dastardly Forces Of The Universe, they were undoubtedly developed into hybrids by the twisted mind of the bugger who invented splinters.

Ah, yes, dilemmas, and some of the very perplexing ones can be those connected with smaller capacity cartridge cases and the occasional problem of not being able to get enough of an ideal powder into them and still utilize the desired bullet.

One decades-long solution has been a funnel/long drop tube assembly; several manufacturing companies used to produce them, and Bonanza was one. The usually encountered drop tube length is about 6-inches, and there was, and is, some success to be had by such an approach. They **could** allow an addition of several more grains of propellant: the Bonanza catalog stated, the ".....momentum of the powder dropping down the tube results in larger volume by weight than compressing the charge."

Not to be outdone by such companies, I decided to build my own! And, not to be restricted by commodity protocol, I built mine longer (bigger being better — right?). Furthermore, I was then shooting sizeable amounts of ammunition recreationally through a brace of .458 Winchester magnum-caliber Ruger No. 1's — over three hundred rounds per week and in a variety of loadings — so, indeed, I needed a **bigger** drop tube than normal; big caliber, big tube, you know.

My First Drop Tube Assembly utilized a standard RCBS green plastic funnel at the

Continued on next page

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MORE POWDER

Continued

top in which I'd drilled out the hole, enlarging it from 1/4″ to 11/32″. The tube itself was 9-inches long with a 7/16″ I.D. and a wide flare (to over 50-caliber) at the bottom end. There was no restriction to the powder flow whatsoever . . . it proved to be an absolutely worthless gadget which didn't work well for anything except inconvenience as well as making me more proficient at spilling powder onto the floor. This "drop tube" provided no increase in gunpowder compacting over the direct measure-to-case method of charging, or even by the standard funnel approach.

Dilemma. Now where have I heard of that word?

I searched around and finally located a Bonanza Funnel and Long Drop Tube to examine the thing more closely this time. Now I noticed those little holes — not large ones — at the inside top and bottom. Also, I saw something else that evaded me the first time around . . . the drop tube's I.D. was little — not large. Perhaps that was one of the answers — small holes.

My Second Drop Tube Assembly was the same length as the First, 9-inches. BUT . . . and I believed myself getting wiser by the moment . . . the tube was **smaller** — its I.D. was a scant 5/16″. Additionally, I had attached two new RCBS funnels and left them as-issued by the factory — the hole in the top one measured 1/4″; the one in the bottom was slightly smaller, 7/32″.

The second batch of powdered cases showed an improvement this time — a reduction of 1/16″ in the level of propellant; tapping charged cases on the hard bench didn't lower it any further. This was disappointing — only 1/16″ gain!

Numerous telephone calls and visits to gun shops, custom and otherwise, produced a lot of non-tangible drop tube information. Being in the approximate area, I was able to easily drive to Kent Hodgeson's CUSTOM RELOADES shop (now out of business — he retired) in Chino Valley, Arizona. Yes, he occasionally used them; yes, they did work; yes, they HAD to have double-constrictions (top and bottom) or they weren't very effective. His most graphic example was a 6 1/2″-long, 5/16″ I.D. tube with .22-caliber holes in each of the top and bottom funnels. This assembly he made up himself and used mainly for reloading the .22 Hornet cartridge with 11-grains of #4227 powder. Without this drop tube assembly, the 11-grain charge was rounded and overflowed the case; with it, an empty space of 1/8″ in the (case) necks was achieved, a drastic improvement to be sure.

Slowly, the dark clouds of dilemma began to disperse.

My Third Drop Tube Assembly ended up being large indeed — a full 21″ in length. It was made of copper tubing with a 5/16″ I.D.; two more RCBS funnels were purchased for it, each having a 7/32″ hole diameter. Now, I figured I really had something! Rushing to my reloading bench I quickly handweighed several charges of IMR #3031, trickled them into the cases just to find that I'd only gained another 1/16″ in powder level reduction over the 9″ Second Drop Tube Assembly. BUT, with the long, heavy bullets normally used in the .458 Win. mag. cartridge, and with the cartridge's under-bore-capacity case, maybe this so far achieved total of 1/8″ lowering of the propellant level wasn't so bad after all, especially when high-volume powder charges are used in conjunction with an inevitable loosely-fitting seating die. Case bulging would be minimized.

With my three drop tube assemblies in hand, I went back to Hodgeson's with the request that he discovers what results can be had with them and IMR #4350 powder in some .375 H&H magnum cases. His elected charge was 77-grains; the cases were all Winchester-made; powder was poured at a slow trickle . . . and here are his findings.

With standard RCBS funnel (same results as with my First Drop Tube) -
FIRED CASE - powder level to bottom of shoulder.
SIZED CASE - " " " bottom of neck.

With my double-constriction Second Drop Tube, 9" length -
FIRED CASE - powder level to bottom of shoulder.
SIZED CASE - " " halfway up shoulder.

With my long 21" Third Drop Tube, double-constriction -
FIRED CASE - powder level to 1/16" below shoulder.
SIZED CASE - " " " bottom of shoulder.

- Hodgeson's Conclusions: - "There is a gain of approximately 1/8" utilizing the long 21" drop tube assembly with this powder and cartridge case."

(WRITER'S NOTE: This parallelled my findings with the .458 Win. mag. cartridge and IMR #3031 powder).

"Going to a (slightly) faster powder will provide more case room with the same velocity range."

Continued on page 14

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NBRSA News

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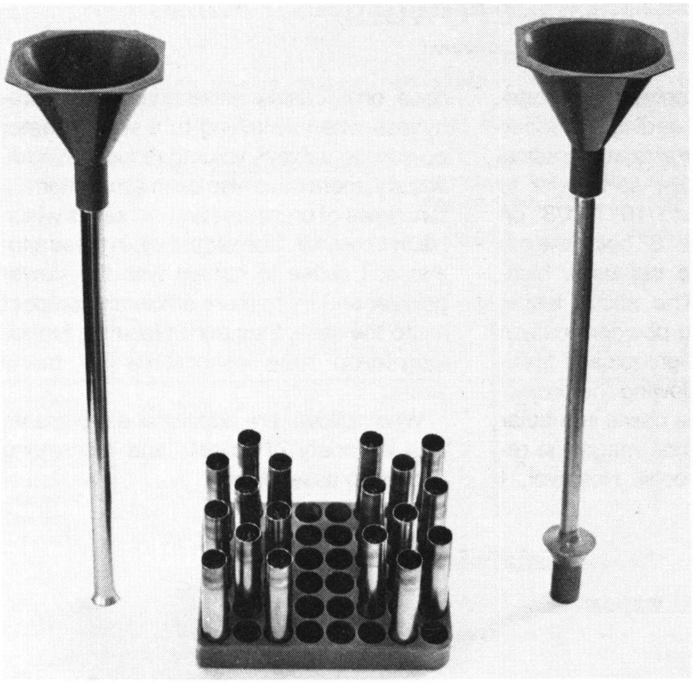

- CALIBER: .458 Winchester magnum; Winchester-made cases.
- HANDWEIGHED POWDER CHARGES: 71-grs. IMR #3031, POURED VERY SLOWLY. Total powder drop distance from scale pan to case mouth was 12 5/8-inches.

On the left, nine cases powdered using the First Drop Tube assembly with no restriction to (powder) flow; powder level was identical to that achieved using a standard RCBS funnel: space between level of powder and case mouth is 1/4-inch. At the right, nine cases powdered using the Second Drop Tube assembly having double constriction; space between powder level and case mouth is 5/16-inch, a gain of 1/16-inch in powder level reduction.

Hodgeson holding the 21″ Third Drop Tube assembly. (This photo was taken at the onset of our business dealings, and he's approaching the situation with decided skepticism. For that matter I am too — how can one trust a fella who doesn't have a mustache?).

The ultimate quest! With determined set to rugged jaws, 25-lbs. of Quonsett #229 Propellant goes into a single .22-250 case. Even with this 11′ 7″-long double primary-and-secondary, triple-constricted drop tube assembly, this lady admits she does regrettably anticipate a somewhat compressed powder charge. Ahhh, dilemmas!

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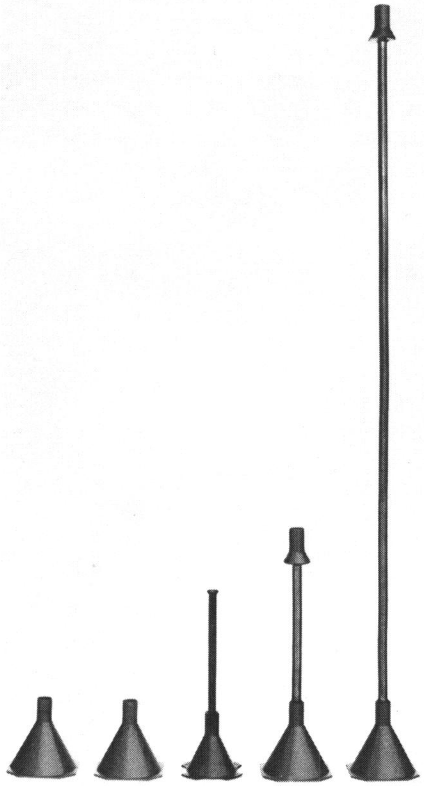
MORE POWDER

Continued

Hodgeson's second concluding statement above warrants re-reading. Personally, I've never felt comfortable with radical powder compression either as I prefer to compress only from about 1/16″ to 1/8″ on the average, with about 3/16″ being the extreme with some of the big bore, high-capacity-case rounds. The above lesser amounts, while supplying powder position uniformity for consistent ignition and burning, also assists in not allowing the projectiles to drive back into the cases in tubular magazine rifles, or with box magazine repeaters of substantial recoil. However, I have, on occasion, experienced an accuracy loss when switching to a slightly faster powder to achieve volume reduction; additionally, there have also been some intermittent times of pressure level increases which I didn't care for. Consequently, in these situations, I chose to remain with the slower powder and try to more efficiently compact it into the case, thus my advocating funnel/long drop tube assemblies for many years.

What follows are additional experiments with a variety of funnels and funnel/long drop tube assemblies.



Throughout the years, I've found these units pictured to be indispensable in regulating a wide variety of charged case powder levels. From left to right . . . a standard RCBS powder funnel with a .22-caliber hole (Item A); an identical funnel but with the hole enlarged to 11/32″ (Item B); the Forster-Bonanza 5 1/2″-long funnel/long drop tube assembly (Item U); my own 7 1/4″-long, double-constriction funnel long drop tube assembly with .22-caliber holes (Item H); and, also my own, a 28″-long, double-constriction funnel/long drop tube assembly with .22-caliber holes (Item N). Both of these latter use the 3/8″-OD (5/16″-ID) copper tubing.
(Not shown are any of the 20″ assemblies)

- - - KEY - - -

Item	Description
- FUNNELS ONLY.....	
A	Two RCBS standard (#09087), .22-.45-caliber, 15/64" holes.*
B	One modified standard RCBS drilled out to an 11/32" hole.
C	Two standard .17-caliber RCBS (#09086).
X	Two white plastic household, 3/8" holes.
- FUNNEL/LONG DROP TUBE ASSEMBLIES.....	
1/4" O.D. copper tubing, 20" long:	
D	.17-caliber top funnel; .22-caliber bottom funnel.
E	.17-caliber funnels top and bottom.
F	.22-caliber top funnel; .17-caliber bottom funnel.
G	.22-caliber funnels top and bottom.
3/8" O.D. copper tubing, 7 1/4" long:	
H	.22-caliber funnels top and bottom.
3/8" O.D. copper tubing, 20" long:	
I	.17-caliber top funnel; .22-caliber bottom funnel.
J	.22-caliber funnels top and bottom.
K	.22-caliber top funnel; .17-caliber bottom funnel.
L	.17-caliber funnels top and bottom.
M	Modified RCBS (11/32" hole) top; .17-caliber bottom funnel.
3/8" O.D. copper tubing, 28" long:	
N	.22-caliber funnels top and bottom.
1/2" O.D. copper tubing, 20" long:	
O	.22-caliber top funnel; modified RCBS (11/32" hole) bottom.
P	.22-caliber funnels top and bottom.
Q	Modified RCBS (11/32" hole) top; .22-caliber bottom funnel.
R	.22-caliber top funnel; household funnel (3/8" hole) bottom.
S	Household funnel (3/8" hole) top; .22-caliber bottom funnel.
T	Household funnels (3/8" holes) top and bottom.
SPECIALTY; Forster "Blue Ribbon" funnel/long drop tube (Product #011021), 5/16" O.D. tubing, 5 1/2" long:	
U	.22-caliber hole in (top) funnel; no constriction on bottom of drop tube.

* - Holes stipulated as .22-caliber in this chart.

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- - - RESULTS: FUNNELS and FUNNEL/LONG DROP TUBE ASSEMBLIES - - -

- Each powder charge: 80-grains, handweighed; poured at a slow trickle with scale pan held 3" above the top of the funnel.
- Cartridge case used: full-length sized .450 Watts magnum shortened to 2.700" length. (.200" longer than that of the .458 Win. mag.).

Letters below indicate the funnel unit.

	DuPont FFFG Black	Winchester 296 Ball	Winchester 748 Ball	IMR #4227	IMR #3031	IMR #4064	IMR #4350
Minimum Benefits	A, B.	A, P, S.	B	B	B	A, B.	A, B.
Maximum Benefits (Lowest Powder Level).	T	J, T.	J, R, T.	R, T.	N	N	N

Extreme spread: 13/32"

- -

In reloading, powder weight and volume as well as charging consistencies can be very important. "Dumping" the charge into the case vs. "fast pour" vs. a "slow trickle" varies the levels of respective powders a great deal; the latter provides the best compacting benefits.

The Following Results Were Obtained With IMR #4227 Only

POWDER INTRODUCTION	LOWEST LEVEL IN CASE	HIGHEST LEVEL IN CASE	DIFFERENCE IN POWDER LEVEL
Fast pour	L	A	5/64"
Slow pour	E	B	3/16"

Extreme spread of powder levels in charged case: 13/64"

To conclude, yes, there are some definite benefits to be had with funnel/long drop tube assemblies; they are relative to many factors, among them the propellant type and quantity, and the rate and distance of pour from the scale pan. Throughout the past three decades, beginning in latter grade school years, I've handloaded tens of thousands of rounds of rifle ammunition in a variety of calibers, but mostly in the larger bores, and primarily using the IMR series of powders. I've found the five funnel units pictured to be extremely valuable in regulating propellant levels for some target and many hunting-category rounds.

Again relative to the specific propellant, its type and the quantity involved, funnel hole dimensions can assist or be detrimental as can drop tube length and its internal dimension. Your own individual experimentation can prove to be very important in the final result. As to my own personal approach and application, I've found, of the five units pictured, that funnel **Item B,** and funnel/long drop tube **Items H** and **N** are the ones I use most; but, most all of my applications are with the coarser grained IMR powders. As an across-the-board recommendation to readers, I'd suggest **Item A, Item H** and **Item J,** coupled with the rate (very slow!) and distance (about three to four inches above the funnel mouth) the powder is poured from the scale pan to be those that will often prove to be the most helpful. Exceeding the 20″ length of **Item J** is for extreme situations that are rare. While my 28″-long assembly **(Item N)** has periodically bailed me out of jams, and while we occasionally read of bison hunters back in the 1880's sometimes using "long funnels" which reached up to 36″ in length, those are exceptional conditions — but, that option is there if you need it as the increase to extreme length can provide slightly more benefit.

No, funnel/long drop tube assemblies don't accomplish as much as I'd expected with the coarser powders despite their increased feeding efficiency. But, they do help a little, and sometimes that can prove to be a whole lot.

Karl Bosselmann
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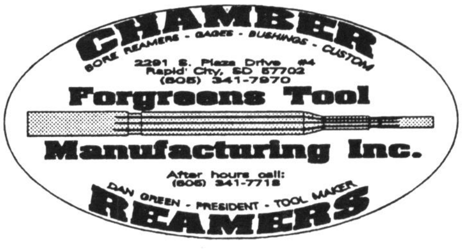

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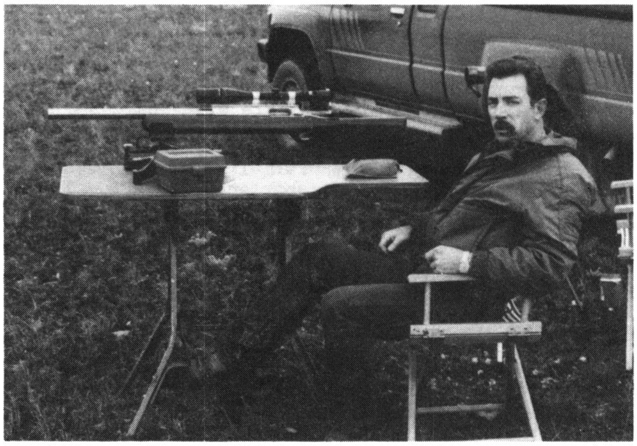
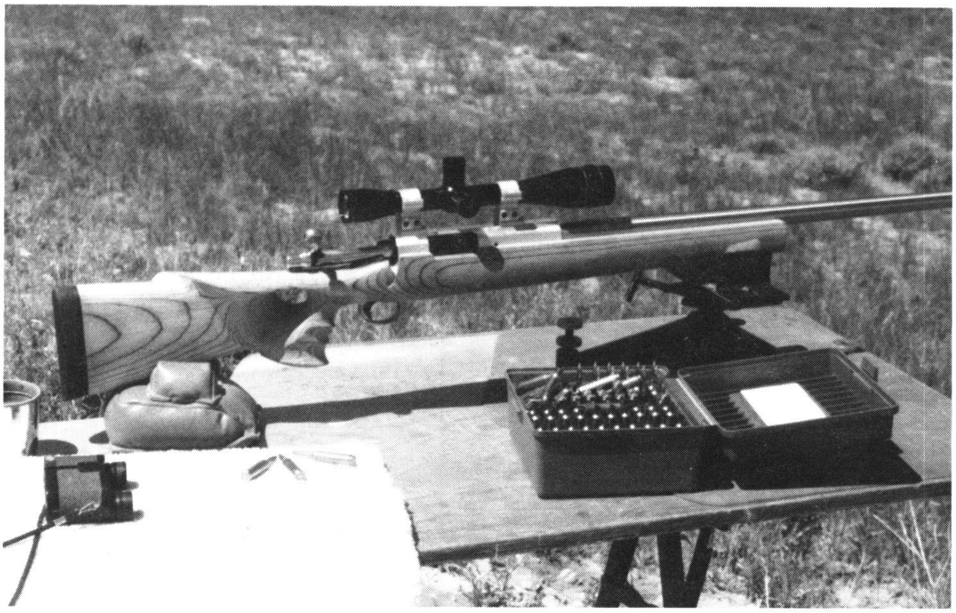


Uncle Jeem Pratt likes to shoot off the hood of his Jeep.



My 257 Improved on the portable bench. Sleeved Remington, Lilja 28″ fluted barrel, laminated maple stock and Leupold 12X in Kelbly rings. Smithed by Lilja.

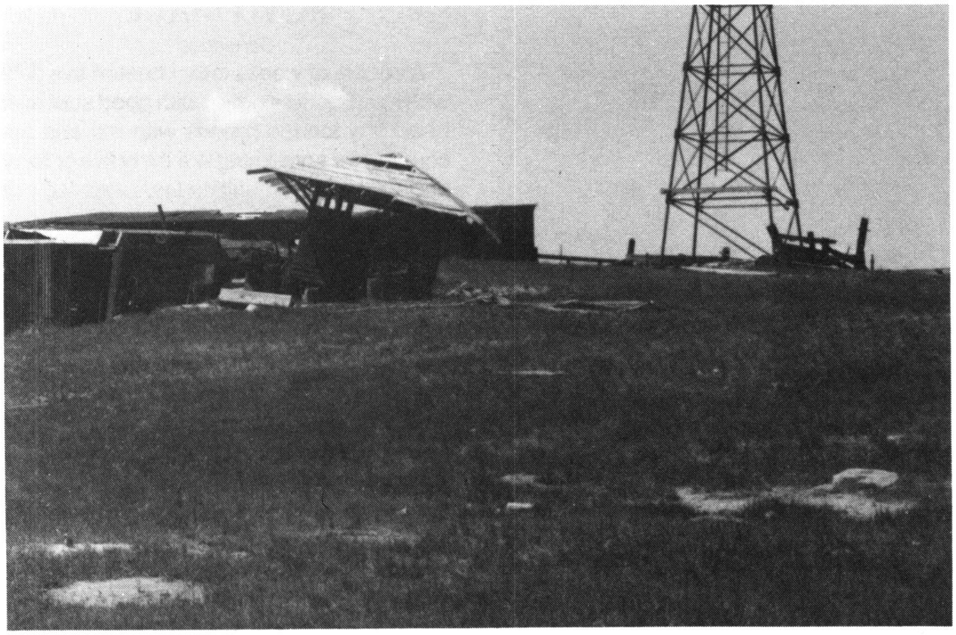
Fourteen miles out of town I turned off the highway and headed south on a dirt road. The road led to a prairie dog town about four miles away. It had been raining heavily off and on the past couple of weeks and the road was muddy but passable. I locked in the four wheel drive hubs anyway.

A few miles west a small storm cell was drifting my way. I could see the rain drifting down in long, misty sheets. Here in Wyoming it doesn't rain normal, not what you might call normal in most parts of the country anyway. The storm clouds are generally high, maybe eighteen to twenty thousand feet up. They have to be to clear the mountain ranges. The storm cells are usually isolated, drifting around and drowning small areas, sometimes only yards across and leaving other areas dry. On hot days the long tendrils of rain often do not reach the ground, evaporating before they touch. Meteorologists have a name for this type of rain but I can't remember what it is. Sometimes you can stand directly under one of these storms and watch the water coming down but not get wet, it all evaporates before it reaches you. At other times the storm clouds will appear to turn themselves into huge funnels, all water, and drown the dickens out of a small area. All their water gone, the clouds break up and disappear.

This particular storm cell looked like it might miss me so I went on. A couple of miles further I came to a long mud hole. There was no way around it so I took the chance and dived in. Made it through alright but my poor truck got covered with mud.

The prairie dog town was in a small valley in the midst of an old oil field. Old buildings, oil tanks and various parts and pieces from drilling operations were scattered around the area.

I pulled up on the south side of the valley and set up my shooting bench. This day I was shooting my 257 Improved as I wanted to try the new Fowler 85 grain 25 caliber bullets on prairie dogs. This dog town is about 300 yards wide, reaching better than 700



The prairie dog town in the old oil field.

Ample evidence of the effectiveness of the new Fowler 25 caliber bullets.

yards to the head of the valley from where my bench was set up. Dogs were plentiful so I started on the closer ones, all the time keeping an eye on the storm, which was drifting my direction rapidly. I got off exactly fourteen shots before the rain hit me. Twelve kills and two misses, both my fault when I misjudged the wind. All were shot from ranges varying from 200 to 400 yards.

The Fowler bullets performed superbly, blowing up predictably and killing the dogs with one shot.

I had hunted this town a couple of weeks earlier with Dave Tally, a Glenrock, Wyoming gunsmith of considerable fame. Visiting his shop Dave showed me a Winchester in 375 H&H. It was one of three going to a wealthy Japanese customer, a package worth $80,000. Needless to say the rifle was absolutely beautiful but I nearly dropped it when he told me the price. Dave is also a pretty good shot, beating me nicely on this hunt. Since then I have walked it out thoroughly, getting all the ranges and landmarks fixed in my mind. Next time I should be better competition. Dave prefers to build varmint rifles using Ruger #1 actions and Douglas or Hart stainless barrels, usually in 223 which he feels is a good all around varmint cartridge.

Continued on next page

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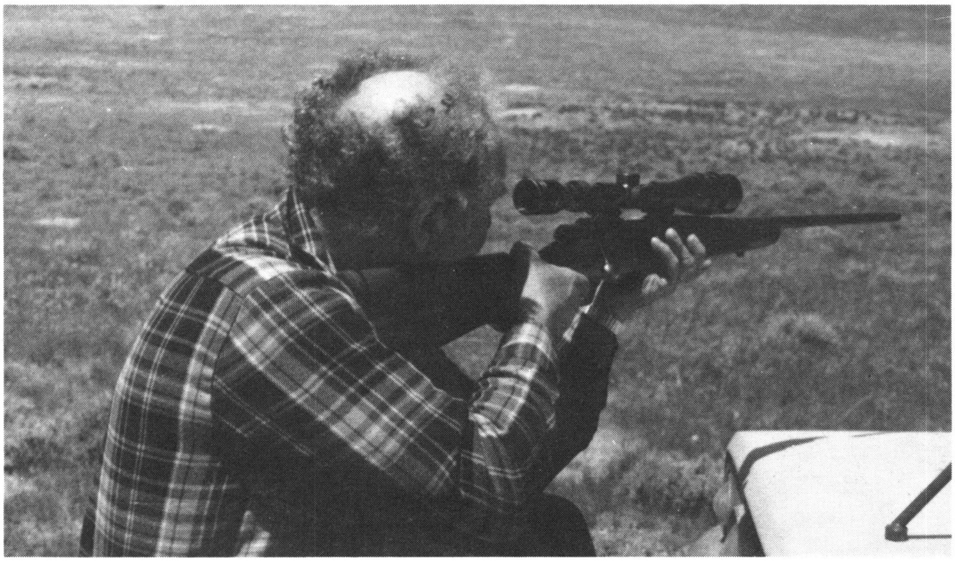
Uncle Jeem and his daughter shooting prairie dogs.



Uncle Jeem shooting dogs with his 270, offhand.

Uncle Jeem shooting dogs with his 30-30 Contender.

BOYD MACE

Continued

A couple of weeks later I hunted this field with my 222 Remington with good success. I had fifty loaded rounds with me and accounted for something like thirty five or forty dogs. Out of ammunition I was headed out when I ran into a friend, one Jim Pratt, occasionally known as Uncle Jeem. Uncle Jeem took me to another town I was unfamiliar with. I spotted for him while he shot dogs with his Remington 223 factory rifle. After awhile he reached into his Jeep and hauled out another rifle. The noise from this gun was unexpectedly loud so I asked what he was shooting. It was a 270, and he was shooting cast bullets! Uncle Jeem shoots prairie dogs with whatever rifle he has handy, he ain't particular.

Uncle Jeem took me to another dog town a couple of miles further south to try it. This town is about perfect for long distance work, in a long shallow valley a half mile or so wide and maybe two miles long. From the lower end you can shoot dogs as far as you can see. I had nothing to shoot with so Uncle Jeem hauls out another gun for me to try. It was, of all things, a Thompson Contender in 30-30 and open sights. I confined my shooting to a hundred yards or less and managed to at least scare the bejabbers out of a few dogs, but I don't think I hit any.

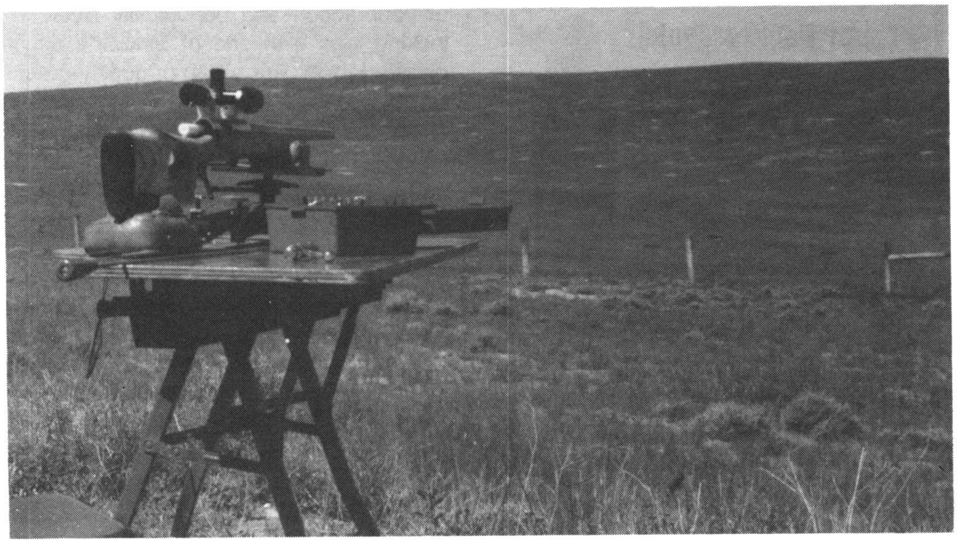
Last month I revisited the dog town in the old oilfield. I was working the graveyard shift and stopped after work. In August it was ungodly hot during the day and all sensible prairie dogs are underground to escape the heat. The early mornings are cool, this particular morning no exception. I had to wear a jacket to fend off the icy breezes drifting down off the mountain.

I had the 240 Badger with me and 50 rounds of ammunition. The gun had the 12 twist barrel on it so I was using Berger 80 grain bullets. The Badger weighs 32 pounds and hardly recoils at all. The air was nice and clear with no mirage problems so I set to work. I killed somewhere around 32 or 33 dogs using up the first thirty five rounds at ranges out to 400 yards. Tiring of this I decided to try a few up at the end of the dog town, a distance of 700 yards. I knew the range as I had walked it off during one of my earlier hunts.

This was going to be difficult, even with the Badger. I had no one along to spot for me and couldn't be sure what the wind was doing at that range. The other part of the problem has to do with the burning cloud of gases out in front of the muzzle after each shot. It isn't noticeable at shorter ranges but at long range it obscures your vision briefly, long enough to not be able to see the bullet impact. If the wind is blowing hard enough the gas cloud isn't a problem but then you have to deal with wind drift.

Prairie dog country.

A jackrabbit is disturbed by all the racket and wisely decides to leave fast.



The 257 Improved on the bench overlooking a prairie dog town.

I missed the first five shots at a big dog, not being able to tell exactly where the bullet was impacting. The last shot I was able to see the dust blow a good foot to his right. There was some wind out there! This dog had had enough and dived for safety down his burrow. The next one I connected with after two sighters. I found another one sitting on his burrow and killed him the first round. The wind had come up stronger and started to gust a bit. I used up my last six rounds shooting at another and finally connected with the last round. In all fifteen rounds to kill three dogs. Even at 700 yards it wasn't particularly good shooting but it does underscore the difficulty of long range work without someone to spot for you.

Speaking of spotters, I heard from the Old Fart the other day. He is enjoying his retirement in Vancouver, Washington. Lately he has been fighting the entrenched beurocracy (if I have misspelled this word it is because I can't locate my dictionary and the word processor never heard of it) in trying to get building permits to build his new house. Sounds like you have to have a permit in order to get a permit and the beurocrats don't move too fast. He reported that he has tried some of the Berger 87 grain 25 caliber bullets. At 3550 fps in his 257 Improved he is seeing consistent groups in the low threes, a tremendous improvement over the three quarter inch groups that gun shot with factory bullets. Said he might be out next year for another try at Zortman.

This year I didn't get in as much shooting as I would have liked. A new house and yard work to worry about and the usual domestic chores associated with fixing a house up to suit the little woman. Along with that I embarked on restoring Money Pit #2, a 1970 MGB roadster. After investing twice as much as it is probably worth it is finally nearing completion so I should have more time to think up more gun projects and generally contribute to the wealth of my favorite gunsmiths.

Boyd Mace

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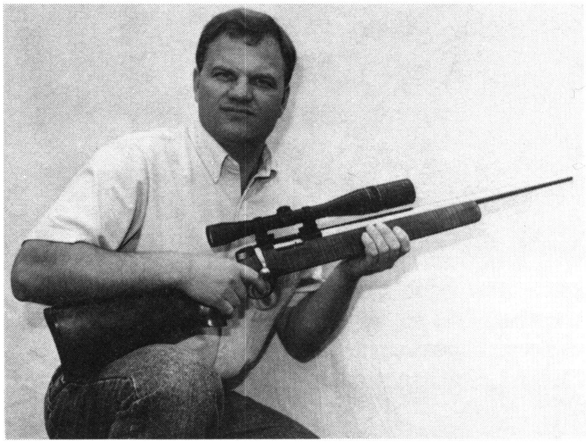
TIME OUT

By

Todd A. Kindler



Ever since my first article appeared in P-S magazine, I have received many letters, packages, telephone calls and even a few personal visits from shooters all over the country and even Canada. There have been many interesting conversations which I hope that I have been able to help some, and I know I have sure learned a lot from talking to many experienced shooters. I thought it would be interesting to share a couple inquiries with you and a couple new items that look good to me.

The number one question so far has been from my fellow 17 fans and is how I clean my 17 caliber rifles. In fact, my wife, Linda, told me yesterday out of the clear blue that she has heard me explain the cleaning process so often that she could even clean a rifle. I told her the next time I come in late after a chuck safari she can take over. Boy did I get quite a look, so I asked her what brought that up. Well the call at midnight last evening for one example, (some of those far western shooters lose track of eastern standard time) as you explained cleaning your 17 rifles to another shooter. It scares me to think what I said half asleep trying to explain proper cleaning techniques to some interested 17 shooters. If any of you guys out there are using toothpaste or mouthwash as your bore cleaner, please read on. Cleaning 17 caliber rifles is really no different than a highly accurate bench rest rifle or any other high intensity varmint rifle. After five or six shots at the range, (come on now there is no big hurry at the range) drag your nylon coated Dewey cleaning rod out and push a 17 caliber patch soaked with Hoppe's Benchrest "9" Kroil or Shooters Choice through the bore. Do not be afraid to run a couple through like this, but always keep your cleaning rod straight. Then put a quality 17 caliber brush on and load the brush with Hoppe's Benchrest "9" or Shooter's Choice and brush the bore in and out about a half dozen times. Do not forget to use a 17 caliber nylon throat guard and lay a couple old rags on top of your stock, so when you drip all over it does not spot your finish. Then let your rifle sit for at least 16-20 minutes which I have found that it takes that long for your barrel to completely cool down. Then work several dry 17 caliber patches back and forth in the bore **keeping your rod straight** all the time.

I realize that I have emphasized this twice, but you can not believe how many bench rest shooters (that should know better) you see bowing their cleaning rod like a banana while cleaning. A few years back, I remember while standing and talking with Stan Buchtel, a well known bench rest shooter, and as we talked he pointed out to me several bench rest shooters bowing their cleaning rods while talking or gawking around. Stan kind of came unglued (which he can do occasionally) and walked over and chewed one of the shooters out. Several top barrel makers have commented in this magazine on the damage to fine rifle barrels by improper cleaning techniques. So please keep these cleaning rods straight.

Once the bore is dry, wipe the muzzle off and dry the chamber with a soft cotton chamber cleaning swab. Glance down the bore to make sure your last patch made it out and everything is clean. Wipe the inside of your action and periodically clean the locking lugs with one of Sinclair's action cleaning tools. Put a dab of quality grease on the two locking lugs of the bolt, and you should be ready to go. This doesn't seem too tough to me and with match stainless barrels costing over $800 installed, I can not understand why some people do not treat them better. Take time to keep your entire rifle clean and all your equipment for that matter. Remember dirty cases will end up inside your reloading dies (which could cause a burr and scratch the other brass) and inside your action (which could cause problems in the trigger mechanism) to eventually work its way inside the bore to really do some damage. One more thing, leave cleaning solvent in your bores all the time, that way it is working for you 24 hours a day. (Editor: This is a bit controversial. On the

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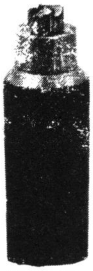

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surface of things, it makes sense. On the other hand, there are some individuals whose judgement I trust . . . who strongly urge against it. Ya pays yer money, and ya takes your pick). My rifles are stored soaking in a horizontal position with their muzzles pointed slightly down. Remember the saying cleanliness is next to Godliness or should we say for rifle shooters cleanliness is accuracyness!

A few weeks back when I arrived home from work, I noticed a square cardboard box laying at my front door. When I picked up the box, I noticed the label was from Midway, so I asked my daughter, Carley, if mom was up to something. Usually she asks Carley to hide these packages if it is going to be a surprise, but this time Carley said no she has not said anything. It was addressed to me, so I said sure hope I am not making a mistake and opened the box. In it was a Shooter's notebook and a letter from Midway's President, Larry W. Potterfield who just recently built a 17 Mach IV on a Remington Model 7 that he says has been real tough on prairie dogs. Sounds like a super little combination for varmints at medium range. The notebook is designed primarily for accuracy minded rifle shooters and has load data sheets already made up with all the information you or I could possibly ever think of and probably more. It is indexed, so you can set it up for each caliber you shoot and comes with a variety of targets for big game rifles to bench/varmint rifles. The targets are three hole punched and can be put in with your load sheets after shooting. Also there is a firearms data sheet to help you keep track of all your firearms, scopes and serial numbers.

A few years back, I started keeping extensive notes on all my rifle shooting, and I soon realized how valuable good records can be. I think there is an old Chinese proverb about the best memories compared to the palest ink and this is very true when keeping accurate shooting records. This rifle shooting notebook makes it easy to record all your shooting information if we just take a few minutes after a days shooting to put it in. Another nice product from Midway,

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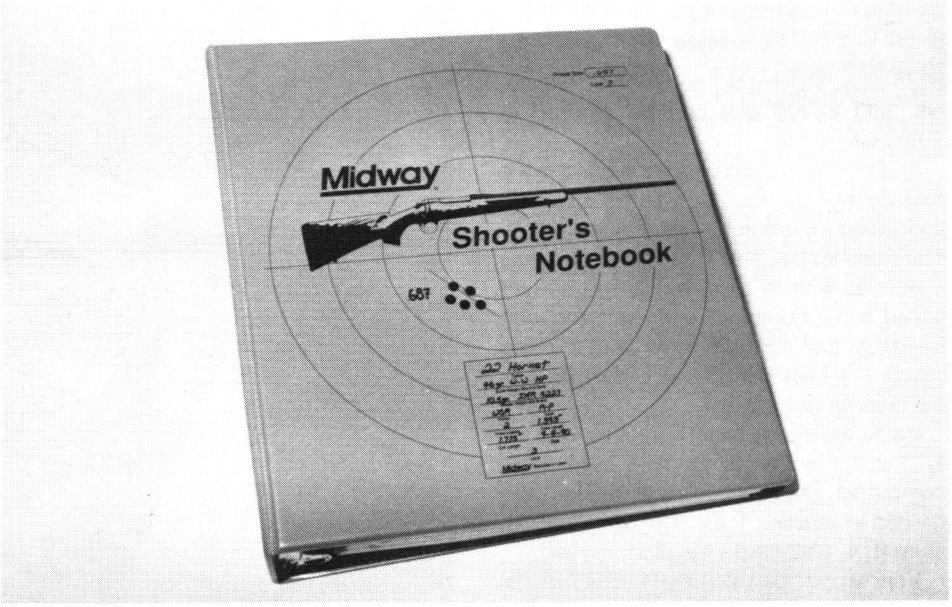
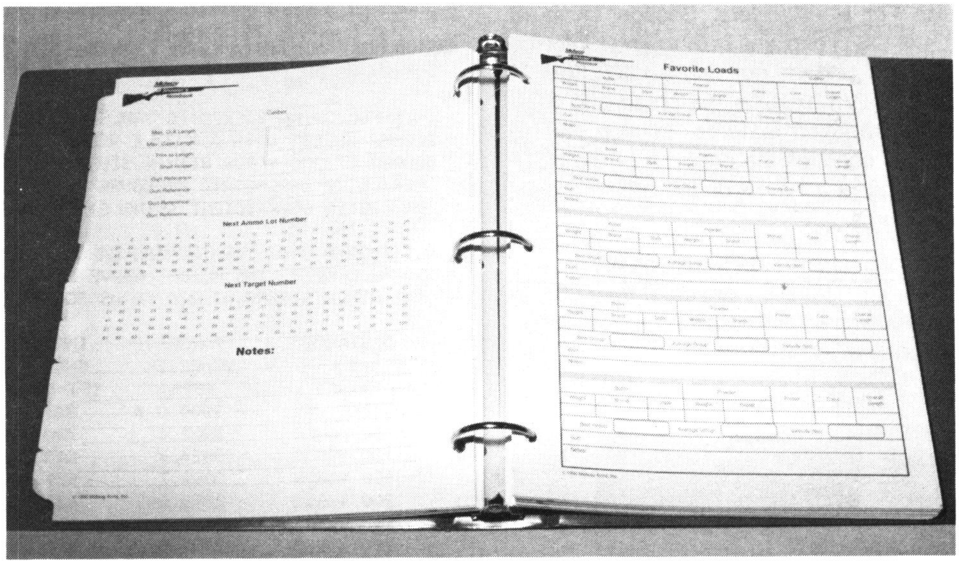


Midway's Shooter's Notebook.



Midway's Shooter's Notebook open to the favorite loads section.

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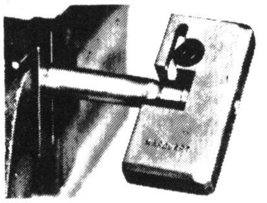

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by

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TIME OUT

Continued

5875-D W. Van Horn Tavern Road, Columbia, MO 65203 and can be ordered at 1-800-243-3220.

The next item of interest showed up in the mailbox not too long ago as an envelope containing a black notebook entitled Silhouette Ballistics by Larry T. Medler. Inside was a nice letter from Larry explaining he had saved serial number 17 of the Silhouette Ballistics just for me. Now that's being thoughtful! I wonder how he knew that was my favorite rifle caliber!

Inside the sturdy black notebook was a 3 1/2″ diskette that is for IBM compatible computers. The notebook was indexed and divided as follows: 1. Exterior, 2. Interior, 3. Gunlist, 4. Standard Deviation, 5. Help.

Very simply "Section One (1. EXTERIOR) deals with the Exterior Ballistics For Silhouette Trajectories. Section Two (2. INTERIOR) illustrates the Simplified Interior Ballistics For Handloaders. Section Three (3. GUN LIST) explains how to enter information and use the gun list. Section Four (4. STD DEV.) explains the Mean and Standard Deviation features. Section Five (5. HELP) contains the print out of the HELP screens for the exterior and interior ballistic programs."

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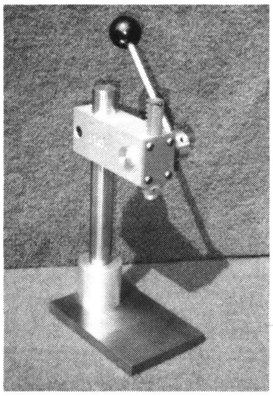

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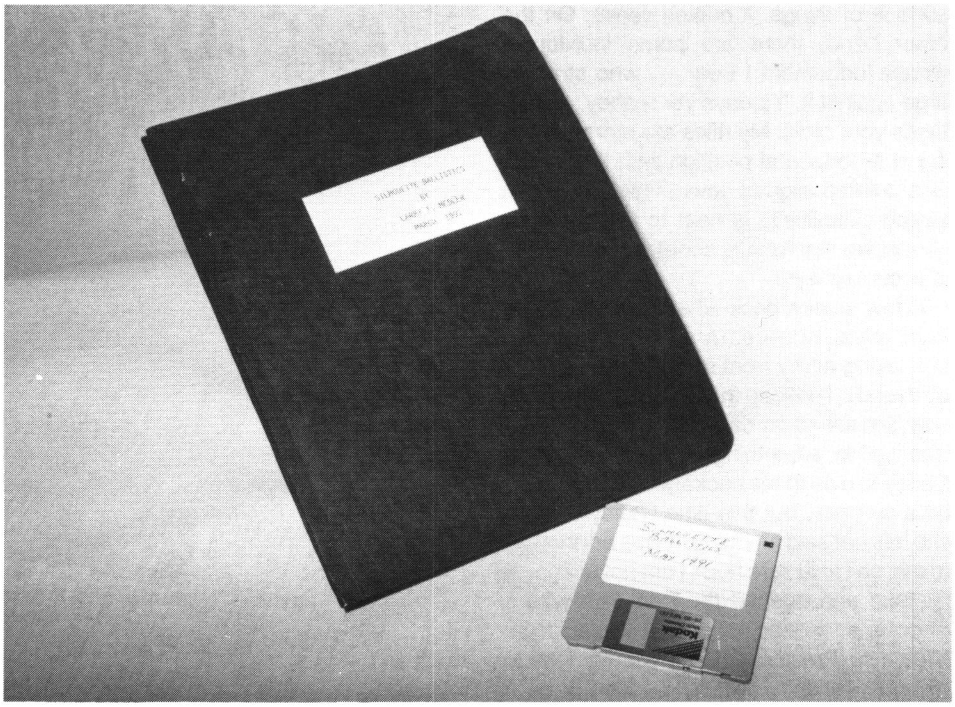

Silhouette Ballistics by Larry T. Medler.

```
THIS FOLLOWING BALLISTIC TABLE IS FOR A SHILEN DGA-S RIFLE THAT IS USING A
BERGER BULLET WITH A MUZZLE VELOCITY OF 3900 FPS AT 59 (DEG-F) 78 % RH AND
ZEROED AT 200 YARDS WITH A SIGHT SETTING OF  0.00 MINUTES AT AN ALTITUDE OF  800
 FEET WITH BAROMETRIC PRESSURE AT 29.50 INCHES OF HG.
 BALLISTIC COEFFICIENT (SINGLE) C1 = .190               BULLET WEIGHT = 25 gr

ALTITUDE = 800   WEATHERMAN BAROMETER = 29.50   TEMPERATURE (F) = 59  RH = 78 %
 SCOPE CENTER LINE HEIGHT ABOVE BORE (INCHES) =  1.5             SCF = 1.000
 THE RIFLE'S ZERO AT 200 YARDS FOR THE ABOVE CONDITIONS IS  0.00 MINUTES.

    DISTANCE       TARGET      IMPACT      FLIGHT     TOTAL        ELEVATION
       TO         VELOCITY     ENERGY       TIME       DROP      SIGHT SETTING
     TARGET        (FPS)      (FT-LBS)     (SEC)    (INCHES)    SCOPE NUMBERS
   MUZZLE VEL.    3900.0 *     844.2      ADJUSTED FOR TEMPERATURE
     50 YARDS     3602.4       720.3       0.04       0.30        -1   15.00
    100 YARDS     3324.7       613.6       0.08       1.27        -1   14.20
    150 YARDS     3064.7       521.3       0.13       3.04        -1   14.44
    200 YARDS     2819.6       441.3       0.18       5.72         0    0.00
    250 YARDS     2587.6       371.7       0.24       9.50         0    0.76
    300 YARDS     2367.0       311.0       0.30      14.56         0    1.67
    350 YARDS     2157.6       258.4       0.36      21.24         0    2.76
    400 YARDS     1958.5       212.9       0.44      29.74         0    4.01
    450 YARDS     1771.4       174.2       0.52      40.60         0    5.49
    500 YARDS     1598.9       141.9       0.61      54.45         0    7.24

  DETAILED TRAJECTORY DATA FOR 400 YARDS AT AN ALTITUDE OF 800 FEET
  COMPARISON DATA TO A GIVEN TEMPERATURE OF 60 DEG-F AND BAR-PRESS OF 29.50

RH= 67 %                            TOTAL DROP (INCHES)
TEMP.       MUZZLE     WEATHERMAN'S - BAROMETRIC PRESSURE IN INCHES OF HG.
(DEG-F)    VELOCITY     28.50       29.00       29.50       30.00       30.50
  30         3844.3     -1.47       -1.82       -2.18       -2.54       -2.92
  35         3854.1     -1.10       -1.43       -1.77       -2.13       -2.49
  40         3863.8     -0.75       -1.06       -1.38       -1.72       -2.08
  45         3873.4     -0.41       -0.70       -1.01       -1.34       -1.67
  50         3883.0     -0.09       -0.37       -0.66       -0.97       -1.29
  55         3892.5      0.21       -0.05       -0.32       -0.61       -0.92
  60         3901.9      0.57        0.26        0.00       -0.27       -0.56
  65         3911.2      0.88        0.61        0.30        0.05       -0.22
  70         3920.5      1.18        0.92        0.66        0.35        0.10
  75         3929.7      1.48        1.23        0.97        0.71        0.41
  80         3938.9      1.78        1.53        1.27        1.01        0.76
  85         3948.0      2.07        1.82        1.57        1.32        1.06
  90         3957.0      2.36        2.12        1.87        1.62        1.37
  95         3966.0      2.65        2.41        2.17        1.92        1.67
  100        3974.9      2.94        2.70        2.46        2.22        1.98

SHILEN DGA-S    17 MACH IV    BERGER 25 GRAIN
DATE - 09-01-1991
```

PRINTOUT A

```
            WIND DEFLECTIONS FOR 400 YARDS AT AN ALTITUDE OF 800 FEET

WIND                       WIND DEFLECTIONS ARE IN INCHES
SPEED                          WIND DIRECTION - DEGREES
 MPH         90      80      70      60      50      40      30      20      10
  3         6.06    5.96    5.69    5.25    4.64    3.89    3.03    2.07    1.05
  5        10.09    9.94    9.49    8.74    7.73    6.49    5.05    3.45    1.75
 10        20.19   19.88   18.97   17.48   15.47   12.98   10.09    6.90    3.50
 15        30.28   29.82   28.46   26.23   23.20   19.47   15.14   10.36    5.26
 20        40.38   39.77   37.95   34.97   30.93   25.96   20.19   13.81    7.01
 25        50.47   49.71   47.43   43.71   38.66   32.45   25.24   17.26    8.76
 30        60.57   59.65   56.92   52.45   46.40   38.93   30.28   20.71   10.51
 40        80.76   79.53   75.89   69.94   61.86   51.91   40.38   27.62   14.02
 50       100.95   99.42   94.86   87.42   77.33   64.89   50.47   34.52   17.52

SHILEN DGA-S      17 MACH IV      BERGER 25 GRAIN
ALTITUDE = 800   WEATHERMAN BAROMETER = 29.50    TEMPERATURE (F) = 59  RH = 67 %
MUZZLE VELOCITY = 3900.0 FPS AT 59 DEG-F                      DATE - 09-01-1991
```

```
            DETAILS FOR THE 10 SHOT GROUP FIRED AT 400 YARDS

  MUZZLE       WIND     HORIZONAL   HORIZONAL   VERTICAL       TOTAL
 VELOCITY   DIRECTION     WIND     DEFLECTION     WIND         DROP
   FPS       DEGREES      MPH        INCHES       MPH         INCHES
   3908       36.0        10.4       14.002       -0.0        29.653
   3907       34.9        13.5       17.718        0.0        29.786
   3884       32.5        12.0       14.533       -0.0        29.747
   3920       36.7        11.5       15.784        0.0        29.711
   3889       32.8        10.9       13.381        0.1        29.970
   3900       34.3        10.4       13.327       -0.1        29.635
   3914       31.9        14.0       16.966        0.1        29.919
   3911       32.5        10.6       13.086       -0.1        29.561
   3909       36.8         9.9       13.592        0.0        29.779
   3900       34.2        13.8       17.719        0.1        29.924
AVERAGE CONDITIONS
  3904.2      34.3        11.7       15.011        0.0        29.768
MAXIMUM DEFLECTIONS FROM A PERFECT ZERO
    LEFT            RIGHT          UP             DOWN
   -2.177           2.457        0.217           -0.192
GROUP SIZE  HORIZONTAL      VERTICAL
               4.633          0.409

                                          CONTINUE = [ENTER]
```

PRINTOUT B

Now that seems like a bunch of data for your favorite cartridges! Before you call or write, let me say as of yet I have not had the chance to try it but varmint shooting season is coming to a close and it sure looks like fun for a cold winter evening. We do have an IBM compatible computer, but Larry's letter asked if I was on speaking terms with it.

Well, Larry, sometimes I am and...well to be honest Linda has a note that comes on the screen when you turn it on that says "Todd, please keep your hands off". So I do have a great instructor, but the notebook also seems to explain everything thoroughly. Larry was nice enough to print out two ballistic sheets for my new 17 Mach IV custom Shilen rifle which shows some of the different things this program can do. Let's take a look at printout A which includes target velocity out to 600 yards, impact energy, flight time (notice the little 17 Mach IV gets out to 500 yards in just over 1/2 second!) total drop, elevation sight setting, and a barometric pressure comparison chart. Print out B includes 400 yard wind deflections at wind speeds from 3 to 50 miles per hour with many different wind angles. This is very interesting as most reloading manuals use the standard 90 degree wind deflection with a 10 mph wind speed. The bottom of this printout I assume is a simulated 10 shot group fired at 400 yards with different wind speeds and angles which explains some of my 400 yard tests this summer.

This program is really loaded and believe me I have just mentioned a couple options,

Continued on next page

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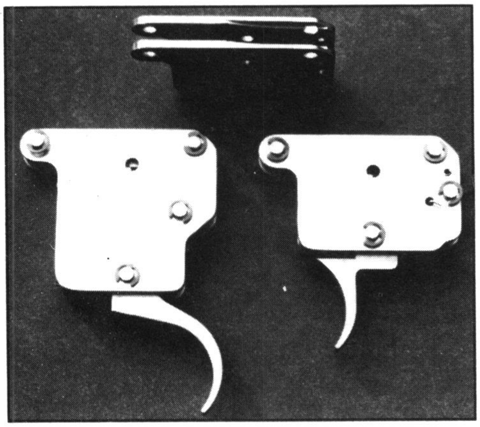

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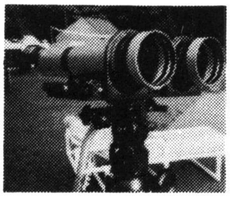
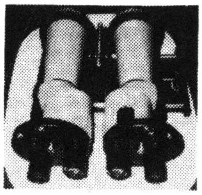
SHEET C

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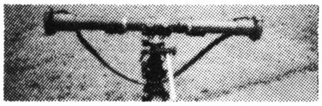
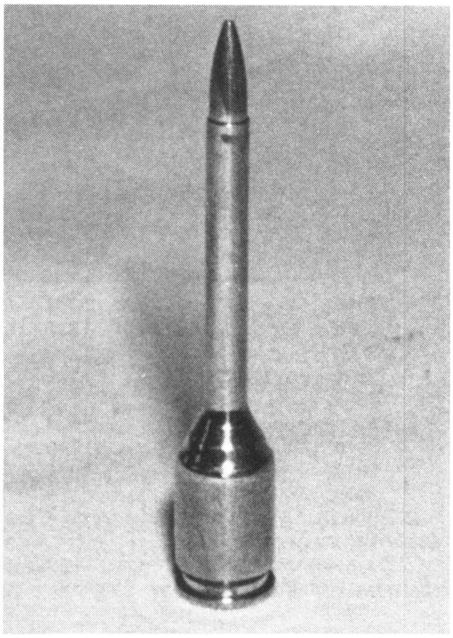


JERRY PHILLIPS
P.O. Box L632 • Langhorne, PA 19047 • (215) 757-5037

TIME OUT

Continued

there is also (sheet C) a small bore rifle trajectories, high power trajectories, short range pistol, national match course, comparison of two bullets side by side on the computer screen and more. A quality program of this type is hard for me to explain with my limited computer experience, but like I said this winter I plan on giving it a try. If you are interested, contact Silhouette Ballistics, 8511 William, Taylor, MI 48180, (313) 292-3324.



The New Super Sonic 17.

Last but not least by any means, is a new scientifically designed 17 cartridge. That is right folks, you read it first here, and I must admit that I am sworn to complete secrecy concerning its developer. The case is based on the 308 Winchester cartridge with the shoulder moved completely back to create a rather long neck. The designer claims the long neck guides the hot burning powder gases directly into the bore which should extend barrel life several hundred thousand rounds. A large rifle primer ignites the small powder charge which is supposed to launch a 17 caliber bullet at eye boggling velocity.

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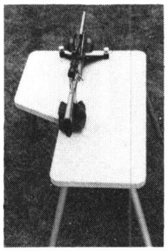

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Well anyway, I reported it and hesitate to tell you that a rabbit sent this to me from somewhere around Waggaman, LA. I promised not to mention any names, but the rabbit (besides specialized cartridge development for the CIA) does some art work for the editor from time to time. Where does the editor find these talented individuals? (Editor: Mainly in comfortable pubs; I just look for the noisy ones).

ADDENDUM

This past Friday, I received a very informative letter from a fellow 17 shooter, who just happens to be an excellent stockmaker as well, requesting detailed ballistics charts for the 17 caliber. As he noted the current reloading manuals just do not offer the 17 shooter much in that area, so late Friday night after our local High School football game, Linda and I tried the Silhouette Ballistics program by Larry T. Medler for the first time. With just a little help from Linda, I was soon running it on my own. I ran detailed drop tables out to 500 yards several different ways, but it was getting very late.

Waking up early Saturday morning (it was tough falling asleep thinking about the program) I tiptoed down stairs to Linda's office and fired up the computer. Soon I had wind drift charts, more drop trajectory sheets and simulated five shot groups at 100 and 300 yards. That program is fun and very user friendly. If I can run the thing, I expect most of our readers should be able to. I have not even begun to use everything yet, but it was hard keeping me away from the computer all weekend. I sent him a bunch of information for his 17 and ran some for my favorite 17 Mach IV. I also sent him the order form from Silhouette Ballistics.

Todd A. Kindler

LEAD BULLETS AND STEEL PLATE

Dear Dave:

The January issue describes Geza Nagy's experience with lead bullets penetrating steel plate.

Some years ago we fired a series of holes through a nondescript 1/2 inch steel plate. We found that the plate splattered bullets at 800 fps, showed shallow stretched dents with bullets travelling about 2,000 fps, but punctured with no dent when the bullet exceeded 2,500 fps.

Velocities of about 2,700 to 4,000 fps produced roughly 1/2 inch diameter holes showing the flower petal peeling on the entrance side as well as the exit side that seemed to be identical. The only obvious difference between the entrance side and the exit was the diameter of the hole which was slightly larger on the exit side in each case.

The holes from .30 cal were almost indistinguishable from the .220 Swift.

The difference between the low velocity lead projectile which splatters on the plate and the high velocity bullet of similar construction which bores through the plate was explained by one observer as a phenomenon known as "relaxation time" of lead. Apparently lead acts like tar or taffy which flows as a super cooled liquid, but will shatter if struck suddenly.

Therefore, it was explained, at high velocity lead does not have time to reshape, and will bore through a substance much harder than itself.

Perhaps some of the learned bretheren out there could explain the physics of this thing to us.

Best regards,
John M. Cochran
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The intent behind the design of this tool was to provide the handloader (who does not wish to neck turn) a tool for determining neck wall uniformity when reloading for factory chambers. The tool comes with one pilot (one caliber) with pilots for most other calibers available. The dial indicator is sold separately.

The tool is quick and easy to use. Simply zero your dial indicator and slide a sized case onto the pilot and rotate the case while watching the indicator for deviations in wall thickness. We suggest culling those cases that deviate more than .003″ in wall thickness.

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Sinclair Neck Wall Thickness Gage shown with .001″ dial indicator

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MORE ON THE .220 SWIFT

by

Charles Aliff Jr.

I'll start off my little discourse by thanking PS magazine for expanding their coverage to now include live varmint rifles and shooters. I was just re-reading some of my 1984 era magazines, and to quote a popular commercial "you've come a long way, baby". Live varmint shooters such as myself have been praying for years for the type of articles that now appear regularly in the pages of Precision Shooting.

I have received considerable input from the article that I wrote for the April, 1990 issue of PS. There are a lot more .220 Swift fans out there than is generally realized. The majority of correspondence that I received was from shooters who were attempting to wring more accuracy out of their Swift. Indicative, I suspect, of the general level of sophistication of the readership; these shooters were not intensely looking for another 50 feet per second velocity . . . rather they wanted tighter groups. Since my last article I've continued my work with the Swift, and I've learned a few lessons and made a few discoveries that may be of interest to other .220 Swift fans.

With regard to the .220-30° Swift I encountered a bit of a problem with this case after four or five firings at full throttle. Around the fourth or fifth firing the case would stick in the chamber, and have to be tapped out with a cleaning rod from the muzzle end. Now mind you, this was with loads that had never given me any signs of pressure in a standard .220 Swift. I had an idea what the problem might be, and sure enough, my suspicions were confirmed when I cut four of the problem cases in half, lengthwise. There was excessive thickening of the brass in the shoulder area. This is probably due to the fact that this wildcat has the same body taper as the standard .220 Swift, which allows the brass to flow to the 30° shoulder, at which point it is essentially arrested. (Editor: A friend of mine had his foot well into the firewall of a Porsche on a Connecticut interstate recently when, to his surprise, he passed a gentleman wearing a funny hat . . . who was holding a radar gun. He also was, to use your phrase, "essentially arrested"). However, not to worry. (Editor: not to worry, hell. The fine was over two hundred dollars). All one has to do is have a sizer die built that bumps the shoulder, and everything is solved. This case shoots equal to the standard Swift, without that rapid case growth that is so common to that cartridge. Doug Shilen (Shilen Rifles Inc.) in Texas has the reamer for this cartridge, which, by the way, has the tight neck (.256) that I prefer. With a cartridge of this type, using a tight neck, the shooter must keep a constant eye on neck clearance in rifle chamber. If it starts to get tight, pressures could quickly escalate through the roof.

When I had my last Swift barreled, I tried something new as an experiment that appears to be paying dividends at this point. I had this Swift barreled with a 4 groove Shilen barrel, which is believed by some to extend the accuracy life of the barrel, due to the beefier size of the lands. Also, in certain circles, ball powders are also believed to extend the accuracy life of the barrel, when compared to extruded powders, due to the lower temperatures that ball powders are said to generate. So I have been trying this combination in recent days.

This rifle now has over 600 rounds through it, with no apparent drop-off in accuracy yet. I am currently shooting H-380 powder; I find myself getting more velocity and better accuracy than I was getting with IMR-4064, which is the old favorite for Swifts. Prior to my current setup I was using an 8 groove barrel, with IMR-4064 at full throttle, and accuracy began to noticeably drop off at the 600 round mark. At 700-800 rounds the drop off in accuracy was impossible to ignore. With my current setup I am not having to chase the lands with the bullet seating die as much as with the old setup. The combination of the 4 groove barrel and the ball powder may yet prove out to be a "better mousetrap".

I also have just tried something else which is a first for me. I have been reading in PS for years about the wonderful shooting the custom 6PPC's are doing with their actions glued into their synthetic stocks. To quote Arsenio Hall, "things that make you go . . . Hmmmm . . .". So I figured . . . my Swift is a full blown custom rifle with a Six thumbhole synthetic stock, so why not? I sent this particular rifle off to Clarence Hammonds with "glue it in" instructions. That gentleman did indeed glue the action into the stock, and drilled holes in the stock to allow access to the pins that hold the trigger assembly in place, in case the trigger would have to come out some day, for one reason or another.

I also addressed another problem that has plagued Swift owners from the beginning. As all Swift owners are painfully aware, after one fires a Swift case four or five times at full throttle, the cases become tight, and do not chamber as easily as they should. Sometimes they chamber hard. And since it is common knowledge that stress has no place in the action of an accurate rifle, it seems to me that having to chamber a round with force on the bolt handle just has to be detrimental to accuracy, considering the stress introduced by the tight fitting round. Maybe so, maybe not. In the word of Senator Sam Irvin of Watergate Hearings fame, "I'm just a dumb ole' country boy that has to have thangs 'splained to me". Anyhow, back to my original thought, the only way to remedy this tight case problem is to full length size the cases.

And as the readers of PS know quite well, the full length dies that are generally available across the counter of your local gun store are not up to our requirements (which is putting it charitably). They size the body way too much, set the shoulder back way too far, and pull the necks as crooked as a hound dawg's rear leg. Much of this has to be laid at the foot of that confounded expander button that is designed to do the neck sizing when the case is out of the die, so as not to provide any support to the case as the neck is being sized. The whole concept is so obsolete that its origins can probably be traced back to the Fred Flintstone era, or possibly earlier yet.

I addressed this problem by having Clarence Hammonds build for me a .220 Swift die such as he advertises in the pages of PS (i.e., sizes the body and bumps the shoulder). Also, this die sizes nearly all the neck, instead of just half, as some dies do. And it uses a Wilson sizer bushing, instead of that cursed expander ball. This is a threaded die that works in a standard press. Because I occasionally go off on a (wrong) tangent, I had previously assumed that since it is a threaded die, there is no way that it could possibly size necks straight. Wrong again! To make a long story short, this is the best quality die that I've ever owned. It doesn't size the bejabbers out of the case body, it just caresses it. (Editor: that phrase should bring a protest or two, we suspect. "Once

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again we have to urge you to keep smut out of these pages . . ."). You can also set the shoulder back as little or as much as you might desire. The case necks have the least amount of runout that I've ever seen, as indicated on my Sinclair concentricity fixture. For the first time in my life I can take Swift cases that are tight and size them to a perfect fit in my chamber. I mean PERFECT! If you own a Swift you simply MUST have one of these dies!

This new combination of glued-in action and Hammonds sizing die has turned my Swift into the most accurate rifle that I've owned or shot to date. Dave, the groups that this rifle is now shooting have to be seen to be believed. The rifle now shoots consistently small groups on a diet of H-380 powder, Remington 9½ primers, and 52 grain Berger bullets, shot touching the rifling, out of a Shilen 4 groove barrel. This rifle shot well before, but not in the same league with the way that it is shooting now.

On to something else that I've just discovered. It is possible that others know this already. Heck, it's just possible that everyone in the whole wide world knows it but me. On the other hand I've never seen this in print, so maybe it isn't so generally known. Another problem with the Swift has always been rapid case stretch. This has been a problem that, over the years, Swift owners have just had to live with. I recently noticed, to my surprise, that the cases that I've been sizing with my new Hammonds die just are not growing as fast. I believe that this is due to two reasons: 1.) the die sizes the body to a minimum as I have it adjusted (approximately .0006″), and 2.) the use of a sizer bushing instead of the old cursed expander ball. As an experiment I took a case that had been sized in my new die, measured the overall length, and then sized it with my old, full length Fred Flintstone die which of course uses an expander ball. The darn case grew .002″! Now, I know that you can polish and round off the corner of an expander ball to ease its operation. It still stretches the blazes out of the case, even after doing this!

If you shoot a Swift you need a die that uses a sizer bushing to size the neck, not an expander ball. Sizing the case body to a minimum, and sizing the neck with a sizer bushing will reduce the rate of growth. A Hammonds built die such as I've described here, and such as he advertises in these pages, will really solve a lot of the Swift's problems. They are not inexpensive ($150.00 plus $5.00 shipping). But I'm here to tell you that it's the best $155.00 I've spent since I started reloading a Swift.

As a final thought, after talking to a lot of Swift owners, and corresponding with a lot more, I believe that the majority of Swift owners do not spend enough time searching for the optimum bullet seating depth for their load. A Swift has a narrow range of bullet seating depth at which it shoots its best. You MUST find the correct depth for your particular gun, or you will otherwise have to content yourself with a 1/2″ - 3/4″ gun. As I've stated before, a Swift requires more out of a loader than many cartridges, but the potential is certainly there if your rifle is properly set up and loaded for.

I really do apologize for not writing sooner. I have realized a wealth of information from PS over the years, and I will try to contribute a bit myself as I can, in the interests of bringing a little something back, to a place from which I've taken a lot. I was married two and a half years ago, now have a new baby girl, and am enrolled in graduate school to boot. I hope that the letter will be of some help to the Swift shooters. If I can be of any help to you personally, feel free to call or write.

Charles R. Aliff Jr.
Box 151
Rock Creek, West Virginia 25174
(304) 934-7511

— End —

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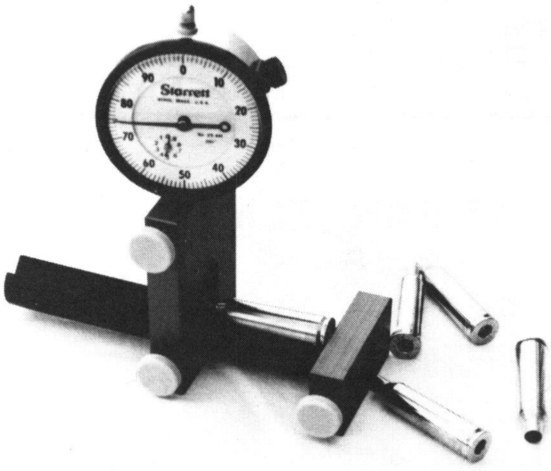

Sinclair Concentricity Gage shown with .001″ dial indicator

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Powder Measures and Powder Lots

Dear David

Just received my copy of the September '91 Precision Shooting, and after reading the feature "Sako-USA Test by Geza Nagy, I feel a few comments are in order.

Mr. Nagy states that 50 clicks on the Culver measure (which he shows on his target illustration as 27.1 gr.) fills his 6PPC USA cases "to the very top", with H-322. If this is the case he should probably check the following:

A. His cases are without necks; trimmed to the shoulder.

B. His Culver is out of whack.

C. His powder scale is out of whack.

I can dump 28 gr. of H-322 all day long and seat 60 gr. Sierra bullets without compressing the charge. This is out of a Redding measure with a short drop tube.

After checking several of my USA cases, which are trimmed to 1.500, 30.1 gr. fills the case to the top of the neck. If I tap the case I can get another .5 gr. into it.

I also believe his velocity figures are a little off; I am getting more velocity with 26.5 gr. of H-322 (68 Berger bullet) than he states he is getting with 27.1 gr. of H-322.

My main purpose for the above comments is that I am a recent subscriber to P.S. magazine and "rookie" just getting into competitive benchrest shooting. I have however shot a couple thousand rounds of 6PPC through a "Socko" single shot varmint rifle, with both match and varmint bullets with a number of different powders. Being the rookie that I am, I sometimes get confused by some of the articles written by the "experts". I certainly would hate for another "rookie" to try a load of "fill it to the top and then tap it down".

Puzzled in Minnesota

GEZA NAGY

Dear Puzzled in Minnesota

Dave Brennan forwarded a copy of your recent letter regarding my "Sako-USA Test" that appeared in the September issue of PS.

Let me start off by relating, with assurance, that:

1. The USA cases have full length necks, trimmed to an overall length of 1.493″ before the test.

2. My Culver powder measure is in perfect working order.

3. My Ohaus scale is in perfect working order.

4. My ability to conduct a test of some reloading theory that interests me at the moment seems unimpaired by either senility or firewater. (Editor: we are pleased to confirm this. At the directive of th PS Board, a basic sanity test was recently given to all PS columnists. The entire group, taken as a group, finished considerably higher than we expected. Note that we are not giving out any specifics here . . . although we will tell you that Geza finished well ahead of our single-shot and lead bullet writers in all phases of the sanity tests. The wildcatters and the big bore writers also tended to bring down the group's sanity average).

Regular readers of this magazine know that I have conducted many tests of various PPC components, including different lots of cases, different lots of 322 powder, and different reamer sizes. The resultant differences found have all been reported in these pages.

The USA cases used in the test were 122 grans in weight, as opposed to the 107-109 grain weight for the older .220 Russian cases. From any viewpoint, that's quite a difference!

The weight difference is due to the thicker web that is found in the USA cases. In my rifle's minimum chamber, with the same powder lot, there was a full grain difference in powder capacity between the two case types. Had I chosen to use a long drop tube I could have stuffed more powder into each case.

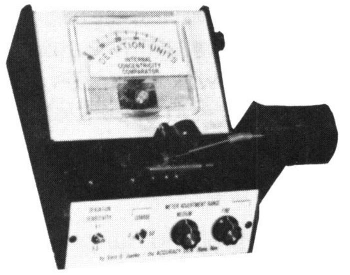
I clearly stated in my article that I had used .220 Russian cases in the morning, with 28.1 grains of the same lot of H322 powder, GI-type, lot #42288.

In my article paragraphs #3 and 4 did cover the differences between the two lots of cases. Paragraph 5 related that the GI type powder lot is on the mild side, when compared to other types that I have worked with. Paragraphs #12-13-14 showed the differences in velocities reached with each lot of cases, with the corresponding amounts of powder used in each lot.

The basic intent of my article was to show the readers that these new USA cases can be made to shoot well, even though their case capacity is less than that of the .220 Russian cases. and this was despite working with a mild lot of H322.

I had previously tested a much more potent lot of H322 in the USA cases, using my light varmint rifle, with its 20½″ barrel. It chronographed well over 3200 feet per second. I cannot recommend the load, as pressure signs showed up, and accuracy was no better.

My rifle chambers are cut to a minimum



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size. The go gauge "just" goes, with a slight pressure felt when closing the bolt on it. The reamer could be run in a tad deeper, with the result that case capacity would increase marginally. The taper in the chamber would allow more case capacity, as the side walls would increase in size along with the length of the case.

I also have a Sako 6PPC varmint-bench rifle. The case capacity was of course much more, due to the larger chamber in that rifle.

The USA cases were designed to fit their chambers made to SAAMI specs. The cases were beefed up in the head area for safety reasons, and made almost .002 larger in diameter than the .220 Russian cases in that area.

I could not use my benchrest dies to reload cases that came out of my factory Sako chamber. I had to buy a set of oversize dies for that purpose. My experiences with the Sako were published in Precision Shooting magazine.

Since its inception in 1975 the 6PPC was a wildcat, and not controlled by SAAMI specs. There was some variation in the reamers made to fit the .220 Russian cases. These USA cases would not chamber in some of my barrels that had been chambered many years ago. On the other hand they will chamber quite easily in newer barrels that were chambered more recently, with a newer, different reamer.

Many shooters bought only a few of the .220 Russian cases, back in the good old days, when they were available. Twenty cases would easily last the life of your barrel. Some shooters would discard their cases after a season or two's usage, solely because they were tired of looking at them.

I was not able to go to this year's Super Shoot, but I heard tales of original, unfired .220 Russian cases being advertised on George Kelbly's bulletin board for $4.00 and $5.00 apiece. (Editor: I was standing next to a shooter with a goodly supply of these cases and who, on seeing these ads for the first time, blinked a few times, and told me, with awe . . . "I've just become a millionaire!"

I do not doubt that you were getting more velocity with 26.5 grains of H322 than I did with 27.1 grains. There are so many variables in chronographed results, such as barrel length, powder lots, temperature, humidity, and elevation above sea level that this is a relative thing.

I have chronographed as much as 150 feet per second difference, while using the same brand of powder and same amount of powder, through the same barrel, on the same day . . . just by changing the lot number of the powder used. Extreme temperature differences alone can turn a safe load into a far-too-hot load.

Every shooter should start out low, and increase his powder charges in small increments, to the point where pressure signs begin to show. You should never follow someone else's load without doing this first.

Test each powder lot separately. Even a change in bullet brand and/or primer lot can drastically change pressure when you get up to the just-about-maximum levels of loading.

For your benefit, and any other new readers of Precision Shooting . . . I have been shooting benchrest for almost 20 years now, with loading and shooting hunting rifles for 5 years before that. I shot several IBS records, and one Canadian record.

I've been writing articles for PS for about 10 years now. I write my articles on what I am curious about at the time. Some articles show resounding success; others show a bit less than rip-roaring success. No matter; I had an idea or theory that I wanted to check out, and I did so. Shooting styles and methods of loading and cleaning guns may be different, but thay can all work. The end result is what counts.

Respectfully,
Geza Nagy

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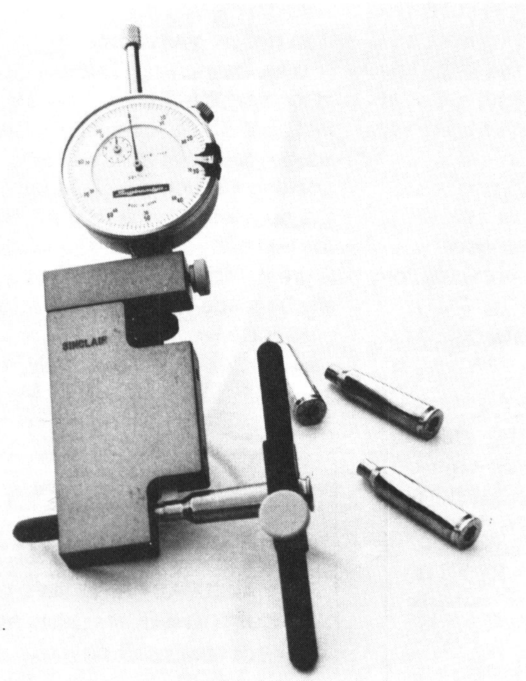

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shown with .001″ dial indicator

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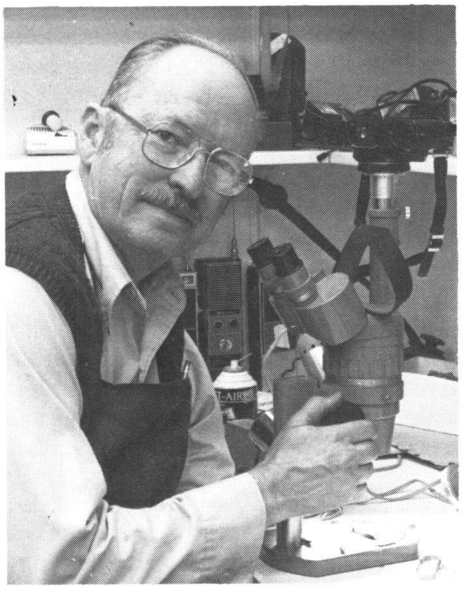

Dear Dave:

I guess I was just lucky on my first bore scope acquisition.

I go by the theory — if it looks good, works good and feels good, it must **be** good.

In the beginning, one misnomer to straighten our readers out on is the use of the expression "fibre optics." If the bore scope is flexible, then it's really using fibre optics for both seeing and illumination. If it's a rigid tube, then most probably the seeing optics are regular glass lenses and the illumination will be optical fibres of glass carrying the light from the source to the end of the tube by surrounding the tube with the fibres.

Creating the image with flexible optical fibres is not easy as the arrangements and location of each fibre must be in the same place at both ends, keeping the fibre strands parallel the whole distance, or severe distortion will be apparent. Also, the resolution with the flexible fibres is nowhere near as fine as the optical lense system; in fact, the image looks grainy due to the image being made up of individual fibres. In fact, it's a mind-boggling creation. The longer the tube, the greater the magnifier must be and if the lense is not wide-angle, then the area covered is very small indeed. This means that looking down the bore in a 6 mm barrel, all you may see is one rifling land, and not several. Also, all you may see in the tiny image is the existence of the land, not what condition it is in — rough, smooth, clean or copper-fouled.

Precision Reloading Inc., a shooter's supplier, obtained the loan of one of their MDS "Focuscopes" from one of their good customers. This gave me an opportunity for comparison.

At first glance and use, it looked good and sharp with its 15″ rigid tube. Then, when compared with my Reichert 4 mm bore scope, it dawned on me that we had a picture, but no usable information. Price ceases to be the factor when you're not getting the information you are after.

The Reichert covered a larger area with a smaller tube and presented an image large enough to discern copper fouling and rough spots. With the 6.5 mm Reichert tube, 30 Cal. bores could be examined in great detail and photos taken when attached to a camera.

I guess I'm spoiled, but readers must be very careful shopping for a bore scope and definitely compare them using their gun barrel or barrels of various sizes. If they can't tell the difference between rough and smooth, or copper fouling and clean, they should save their money and don't buy that scope!

Oh yes, for gun barrels, the scope requires a 90° mirror on the end so they are looking at the side wall. This also directs the light as well as view. Looking straight ahead is a loser — just a long black hole — no useful information.

It requires paying tuition to get educated. One other thing, illumination systems — Bore scopes originally started out as medical cystoscopes for looking into internal body cavities and they carried their own (hot) light source on the end of the scope — a very tiny (grain of wheat) size bulb, very prone to easily burn out if the rheostat brightness control was turned up. The greatest advancement was the remote light source that could be larger, more powerful, and longer-lived; also, much cooler, as it was directed to the end of the bore scope with optical glass fibres.

Well, Dave, I hope I haven't confused and discouraged too many shooters on this subject, but it's a tough one. The first bore scope you look through is a revelation. Looking through a bore scope intended for the purpose is a miracle! It's like shooting the first gun you shoot and hit anything with is great, until you later find out a gun can really be made to hit very small targets.

All for now.

Yours truly,
Merrill D. Martin

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DICK WRIGHT

David,

I hope this strikes your fancy . . . feel I owe you one after the frivolity regarding our beloved and esteemed assistant editor. (Editor: what were those adjectives again?).

Been thinking about doing this for a year or two. Started it once and set it aside . . . had a problem believing any serious types like benchrest shooters would be interested in my whimsical ramblings. (Editor: Nonsense. Benchrest shooters LOVE whimsical ramblings. It's the only language they speak. This entire magazine is ninety eight per cent whimsical ramblings, and two per cent advertising).

About the pictures . . . if these won't print well and, if you intend to use the article . . . let me know. I am going to shoot some black and white photos for the next article and can get some appropriate pics for this one.

For your info only . . . you may have observed by now that I take a certain amount of pride in Glorya's shooting success. Fact is, Glorya had rheumatic fever when she was 7 or 8 years old and it left her with a bad heart valve. She has never been able to compete in any sports. Matter of fact, she has had major heart surgery four times . . . three of them open heart. Last two were valve replacements. Anyway, after we met, 5½ years ago, she started shooting with me and turned out to be both very competitive, fairly coachable, and the whole thing seemed to come to her very naturally. In view of all the softball games, bowling leagues, tennis, etc. she has missed . . . I just love to see her enter a competitive shoot and beat the H--- out of the natives.

Title of next article: LIVIN' WITH A LOVELL or You think PPC brass is a pain.

Last big bench match of the season this weekend at Holton. Will be shooting with the beloved asst. editor and will try to keep him from hurting himself so he can continue the great work. (Editor: What great work is that?)

Regards,
Dick

THE FIRST ANNUAL HARRISON SPORTSMANS' CLUB TOP GUN TOURNAMENT

or "The Child Bride Takes on the Guys"

Dear David,

A while back some of the elders of the local Sportsmans' club to which Glorya and I belong decided to hold a "Top Gun Tournament" in September. Stated objectives were to provide a "nice family weekend" for members, help the members get their deer rifles tuned up for the impending season and, hopefully, modestly increase the club coffers. Fringe benefits to having a lot of members at the club for a weekend were more of a win some - lose some situation . . . both the town pubs and the town Bastille would probably be less busy that weekend.

Anyway, we thought it might be a lot of fun and asked around for some details. Found out one could choose from several events to shoot in such as rifle, shotgun, archery, muzzleloader, etc. You had to shoot in three events, each having a possible score of 100 points. Closest competitor to a maximum of three hundred points took home a big trophy and braggin' rights for a year. There were to be trophies for both a mens' and a womens' division. I asked around for more details and was told to go to the monthly meeting to find out.

First Tuesday of the month found Glorya and I at the clubhouse for the monthly meeting. When the topic of "Top Gun" came up, I started asking the fellow in charge a few questions. He said the rifle events would be smallbore, big bore and muzzleloader. I asked him, "what's a smallbore rifle?"

He didn't look too happy but patiently explained, "a twenty-two."

"You mean any kind of a twenty-two?"

Continued on page 34

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Spuds and our buddy Earl LaDere at the club showing off their trophies. Earl is one of those rare and gifted shooters who . . . in the biggest matches and with the most pressure . . . shoots his best. Real pain in the a-- trying to beat this guy.

The child bride at home after the match. This is basically a picture of gloating, done right, by an expert.

Whilst not related to this article . . . this one shows gloating and being macho . . . done well . . . by an expert.

DICK WRIGHT

Continued

"Yup".

"Is it O.K. to use a scope?" I wanted to know.

"Yup."

"What are you shooting?"

Now he beamed . . . "Got a Ruger 10/22 with a four power. Puts em right in thar."

"What's a big bore rifle?" I asked.

Now I'm starting to irritate . . . this guy doesn't suffer fools gracefully, "any centerfire."

"Any centerfire with a scope", says I, "Great. What are you shooting?"

He smiles again, "Remington auto 30-06 with a scope. We handload and it puts them right in thar."

Happy to find another technically oriented person in the club, I asked, "What kind of powder do you use?"

Sly smile, . . . "Lots."

We found out further that all rifle events would be ten shots, five from benchrest and five offhand. The big bore rifle would be at 100 yards and smallbore at 50 yards, both on regulation targets. On the way home, Glorya and I decided that our Anschutz 54 silhouette gun with the Weaver T-16 and a box of Eley Tenex would cover the smallbore class. Big bore was a little tougher but we settled on the old custom highwall Winchester in 2R Lovell. It has a big Unertl, a set trigger and enough drop in the stock to make it quite comfortable to shoot standing with. A curb weight of 10½ lbs. keeps the recoil down to a minimum.

We decided that the best third event to fill in our programs would be air pistol. We shoot in competition and have a couple of German Feinwerkbau's, Glorya's a Model 2 Co2 gun and mine a Model 90 with their fine electronic trigger. Both these guns came with groups from the factory that were five shots in one 17 caliber hole.

The next couple of weeks found us practicing at home on our air gun range. We also have target model air rifles and could get a lot of practice on the most difficult events; the air pistol and the standing part of the rifle competition. Neither of us had shot much since the previous winters' competitions, but, after a little work, our scores improved to the point where we felt we were ready for Top Gun.

The big weekend arrived and so did we, early Saturday morning, with the car stuffed full of guns and shootin' stuff. We had been appointed range officers down at the rifle range, where most of the action took place, and we were too busy Saturday to shoot ourselves. After looking over the competition, I decided our shootin' buddy Earl LaDere would be the guy to beat. Earl is our local Game Warden and is a pistol specialist. He has won the DNR (Department of Natural Resources) state championship three times. Earl managed to get two events shot Saturday and was only down a few points from his 200 possible.

Sunday morning came, another sunny, lovely Michigan fall day and things were slow enough at the range so that Glorya and I could get some of our scores in. I shot both rifles and ended up tied with Earl thru the two events. Then it was Glorya's turn.

The child bride decided to shoot the little Lovell first for her big bore phase. Did good off the bench . . . only one shot strayed out of the X ring (we used 100 yard big bore targets and they are fairly easy to clean from the bench) for 50 points . . . 4x's. Now for the standing.

I should mention here that Glorya is a pretty good shot . . . been club air pistol champ four times, air rifle champ once, puts plenty of venison in the freezer each fall and, even manages to knock down animals in silhouette competition. However . . . what she does best . . . her true forte . . . is . . . look like she knows what she is doing. See Glorya shoulder that old varmint rifle, fore end delicately balanced on her fingertips, fixing a steely-eyed glare thru that Unertl . . . Looks a lot like a 130 lb. curly headed Harry Pope in drag. Just intimidates the H--- out of the natives.

SPUDS SHOOTS HER STANDING

Just another nickname for the childbride. Anyway, as Glorya fiddles around getting the equipment adjusted and herself properly psyched up for her standing phase . . . enter two more competitors for big bore. I better call them THE BROTHERS SHORT . . . if they ever read this (unlikely) . . . I just hate to visit the dentist. Anyway, again, here's THE BROTHERS SHORT who announce that they are ready for big bore and that they are going to share a rifle. They proudly show me their target gun . . . a Ruger 44 Mag. semi-auto rifle with, what appears to be a Jap scope worth at least $29.95 . . . cost more cause it's a 3 x 9 variable. This one also, so they say, "Puts em right in thar."

By the time I get done examining their target rifle and signing them up, Glorya announces she is ready to shoot standing. I grab the spotting scope and sit at the bench next to her (coaching is allowed).

"O.K., Honey, take your time. If you run out of breath and start wobbling just lean it on the bench, catch your breath, and start again. No time limit."

Long pause . . .

BANG

"O.K., Honey . . . that's a good nine at three o'clock . . . Lot's of time."

Another pause . . . BANG.

"O.K., Honey, that one's a good ten . . . might be a nipper X at four o'clock."

I hear twittering from THE BROTHERS SHORT who having been kinda leaning over my shoulder.

BANG . . . "That's a nine, Glorya . . . lots of time."

BANG . . . "Good ten, Honey, you're doing great."

I should probably mention here that, after the match, Glorya confided to me that she felt it would be worth several points to her if only I DIDN'T coach her.

BANG . . . last shot. Through the scope it looks like she's got a group about the size of a baseball. (Remember; benchrest fans . . . the lady is shooting off her hind legs).

One of THE BROTHERS nudges me and wants a look thru the scope. He does so . . . for quite a while . . . then motions for his buddy to take a look. Buddy does so . . . they exchange significant glances and repair back a ways for a hasty conference. Time lapses . . .

Finally, one of THE BROTHERS comes up to me and mumbles about an important forgotten appointment. This done . . . they gather up their gear . . . AND SKEDADDLE . . . NOT TO RETURN THAT DAY.

The match goes on. Earl borrows our Anschutz to shoot his third event. Does right well too. Glorya shoots smallbore rifle and her air pistol . . . her scores remain in the top three. I finally decide I can't put it off any longer and shoot the air pistol. I throw a couple of major fliers and the score refects same . . . no trophy for me.

When all the scores are in our buddy Earl has won big. The child bride wins the womens' trophy and outscores all but three of the men. Lots of handshaking and picture taking. The club scribe (me) will write an article for the local newspaper to print along with pictures showing big trophies and lots of teeth.

The WOMENS' TOP GUN trophy goes home to the Wright household. Glorya thinks it would look best on top of the TV in the living room. For most of the following year . . . woe be unto anyone walking into that room and not noticing and commenting

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on the trophy. The housekeeper hates to dust the D--- thing.

I'll shoot better next time.

Regards,
Dick Wright

POSTSCRIPT: David, this match took place two years ago. Nowadays, only target shooters show up. The natives do not take kindly to being soundly beaten by a bunch of target shooters with guns that hardly kick enough to really enjoy shooting. This year only silhouette shooters and four position shooters showed up and attendance really didn't justify holding it next year. I'm sure the offhand phase scares the BeJesus out of most gun types.

Immediately after the first match there was a rumor going around that I had said the concept of the match was great . . . but, that it wasn't run very well. The club practiced good management and put me in charge of future matches in perpetuity. I'm quite sure this years' was our last match. Too bad . . . they were fun . . . I'll miss them. By the way . . . THE BROTHERS SHORT . . . their name is Long.

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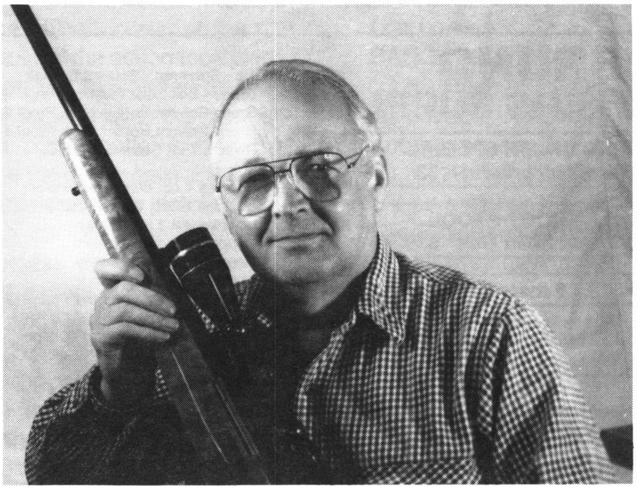
A FIRST JOURNEY FOR PRAIRIE DOGS

by

Bob Jourdan



Planning a varmint hunt by shooters who never make special trips just for varminting can be intimidating. All kinds of questions must be handled concerning the shooting equipment to take plus the accessories that may be needed and of course the decision on where and when to go.

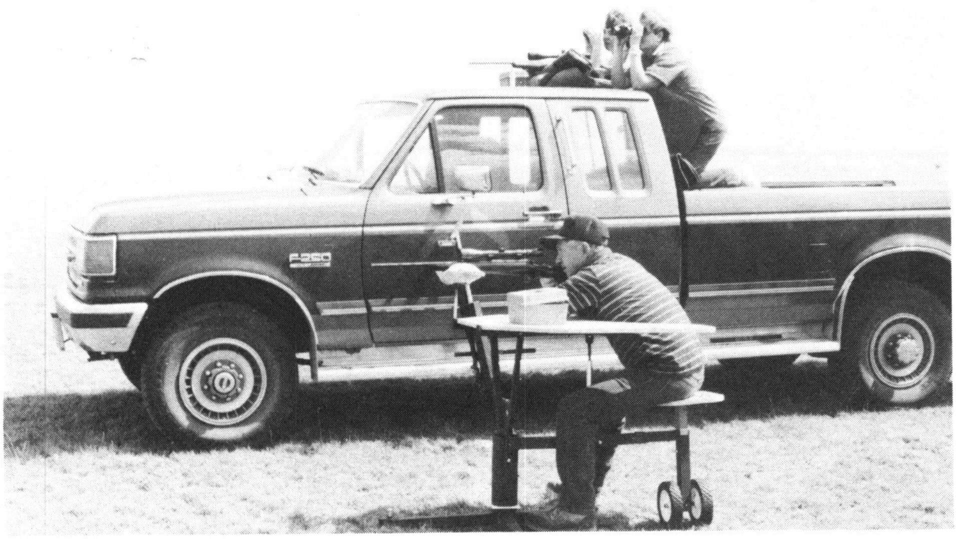
In early August we were in the dog-days of summer, wishing we were out in the high country somewhere on a hunting , fishing or sight-seeing trip enjoying cooler days and crisp nights. We decided to use a prairie dog hunt as an excuse to head west. With little or no idea where the closest dog towns were that would be open to the public, we started inquiring at the local rifle range, at every benchrest match and on every corner where a crowd of one or more people might gather. Before long we bumped into J.T. Powell of Meade, Kansas, a benchrester of several years acquaintance. He mentioned the public National Grasslands found along the eastern borders of New Mexico and Colorado and the western edges of Texas, Oklahoma and Kansas. Others who were dedicated prairie doggers suggested far off places like Montana, South Dakota and Wyoming. They just laughed at our idea of getting perhaps 100 shots or so. To them, if less than 1,000 rounds of ammo are taken and used, the trip is a failure....

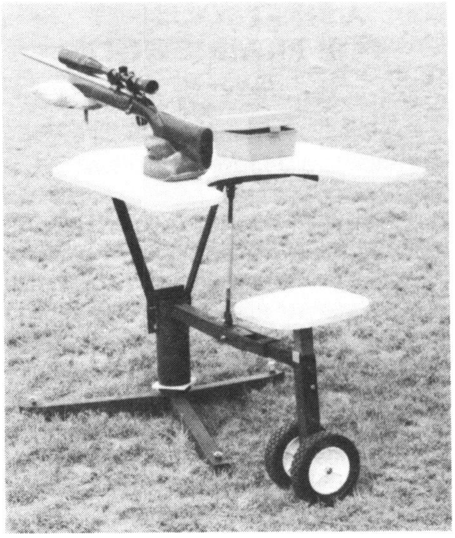
We quickly decided the grasslands would be our best deal in view of our time, the Labor Day weekend, and the distance of only 450 miles. My telephone inquiries to several grassland offices proved educational. The grasslands were originally designated to bring back certain sections of the prairies to the deep grass of the mid-1800s. They would provide recreational areas for scenic drives, picnicing, camping, and even hunting and fishing. Great goals, but perhaps mired in the bureaucratic quagmire of the government in many instances. First, I found they are managed by the Forest Service... even without a forest... Second, I found they are leased out for livestock grazing... even though the goal is to bring back tall grass... Third, I found the offices operated by a typical cross section of folks who are capable of reading their own personal rules into the use of public domain... open for hunting but not recommended... Fourth, I found that several offices are in full promotion of prairie dog hunting. They even produce maps of all prairie dog towns in their areas and go to some effort to get hunters to help on prairie dog population control. At the same time, the Federal Wildlife Service is lining up certain prairie dog towns to close to all use, especially hunting, so as to use prairie dogs for food for the reintroduced black foot ferret. More confusion awaits. State Game & Fish Departments make money off prairie dogs by selling hunting permits while the Animal Rights groups are trying to save the prairie dogs, and the Department of Agriculture maintains a branch to poison them. Then to top it off, the national health services are coming out against prairie dogs as being the carriers of bubonic plague by way of their fleas... Now, what with all our worry over acid rain, dioxin, global warming, the spotted owl crises, ozone depletion, etc., do we really need the bubonic plague...? In my totally confused state-of-mind, I charged ahead with my prairie dog hunting plans.

The rough Prairie Dog camp on Carrizo Creek in southeastern Colorado. The Birdwell Sheep Camp, left, and the Jourdan Cow Camp, right, a rather large improvement over our original tent camps of days gone by.

As it turned out we selected the Comanche National Grasslands, headquartered in Springfield, Colorado, for our hunt. This was based on the excellent reception we got from Cindy who handles all the phone calls and letters. She even gave us names and addresses of private ranchers who allow and encourage prairie dogging.

With this big decision behind us, T.G.


T.G. Birdwell uses the excellent revolving shooting bench, while the ladies are left to shoot from the rocking and rolling truck. With winds up to 35 mph, the truck springs simply allowed too much motion for shooting.


The greatest prairie dog shooting bench yet to be produced. It revolves 360o and will even adjust for tilt, fore and aft. It weighs 55 pounds and breaks down for transportation.

Birdwell, my hunting and shooting partner for many years, his wife, Treabie, my wife, Maryline, and I were ready to give it a go.

Included in our equipment had to be shooting benches. In *Precision Shooting,* Boyd Mace has discussed this several times, so I dusted off one of my earlier designed folding, portable, 30 pound benches, and then took Boyd's recommendation that a full revolving 360° model was needed. Thus, I again went to the design board and turned out one for testing. It is complete with attached seat that revolves with the table, and it breaks down easily for transportation. As it turned out, both benches worked well, but the revolving model was much handier, just as Boyd had said.

As for rifles, we had several good ones to chose from. Maryline wanted her standby varmint-deer rifle, a Remington M700 Clas-

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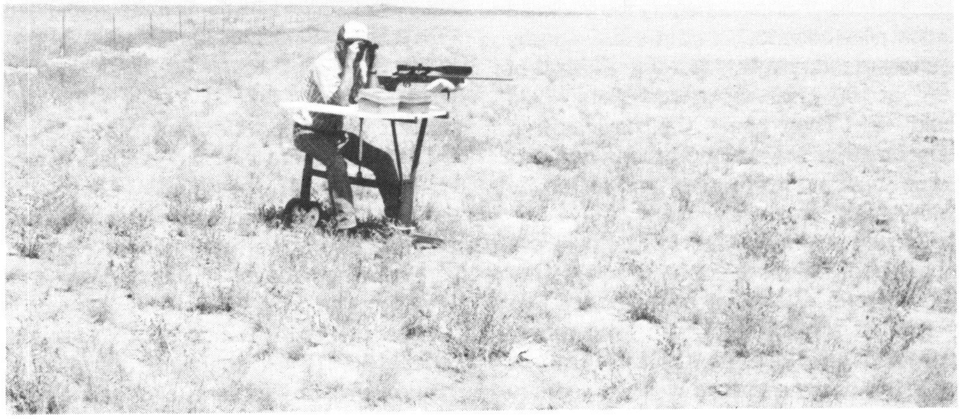
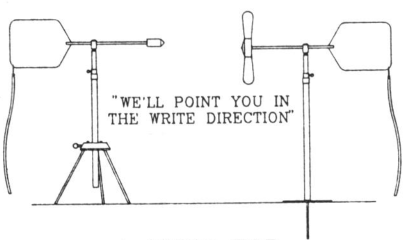

The author glassing for prairie dogs from his revolving bench. This is known as flat land, complete with enough mirage to bend a rifle barrel.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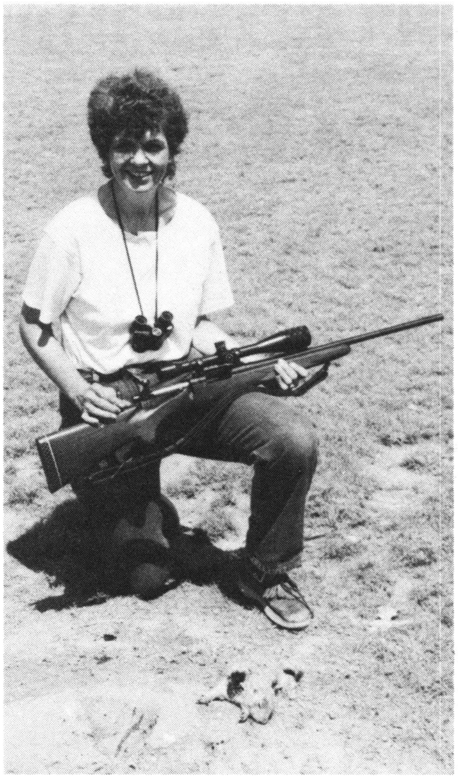
A FIRST JOURNEY FOR PRAIRIE DOGS

Continued

sic in standard .243 Winchester caliber. For some reason that over-the-counter rifle has always been an excellent shooter. Records show that it averages about 1″ with all loads, but with Sierra 60 and 70 grain bullets, as well as with Berger, Fowler and Englebrecht bullets in the same weight range, it averages .7″ with frequent groups under .5″, all at 100 yards. My best rifle for varminting is possibly my Ranger Arms Maverick rifle in .243 Ackley Improved caliber. It averages about .8″ with all bullets and .54″ with bullets of 75 grains and lighter. My records show a number of three shot groups between .16″ and .38″ with lightweight Sierra and Berger bullets. The third rifle selected was my special .250 Ackley Improved that Maryline shot to a fourth place finish in our 1991 Bartlesville Unlimited rifle matches. It is a Remington M700LH short action, Douglas 26″ stainless premium barrel, 1-10 twist, standard neck chamber, McMillan Hunter Category fire truck red stock, pillar bedded, bolted in, etc. Originally it shot all factory bullets to a poor average of .96″ at 100 yards. Selected bullets would hold .7″. Then came the new Fowler benchrest bullets and the groups dropped to .4″ with most powders, and under .3″ with AA2015 powder.

Scopes are becoming my real personal bug-a-boo. Seems there is always something wrong with most of them. My two benchrest scopes have both been rebuilt once and I have sold inaccurate rifles only to later find that the trouble was the scopes. Maryline's rifle has worn several scopes, starting with a 3x9 Leupold that she couldn't pick up moving game in and it had bad parallax problems. She went to a Leupold 2x7 that we later took off due again to too much parallax. The present 2x7 Leupold is not bad, but for this prairie dog trip she needed more power, so I bought a pretty good looking Weaver T10 and installed it three days before we left.



Maryline Jourdan with her favorite prairie dog rifle, a M700 Remington Classic .243. A lot of prairie dogs got in the way.

Treabie Birdwell used a .222 Remington, M700, to do the dirty work on these dogs. She got her first prairie dogs on this trip and is now a "pro".

The scope on my Ranger .243 Ackley is a Leupold 3.5x10 with adjustable objective. It has proven to be excellent on big game, varmints and targets. Parallax does adjust out and the elevation and windage adjustments are correct.

My pet fire truck red .250 Ackley wears a Bausch & Lomb 6x24 varmint scope and it has thus far been the best scope I have ever owned. Everything about it from parallax to elevation and windage adjustments has been outstanding.

Naturally, none of us had loads worked up just for prairie dogging. T.G. and I had both been doing too much experimental shooting, resulting in some odd-ball loads on hand plus most of our cases being blown out at the primer pockets. I checked through my loading room and found no formed Ackley brass for either the .250 or the .243. For Maryline's rifle I found a hundred or so once or twice fired cases, so I immediately

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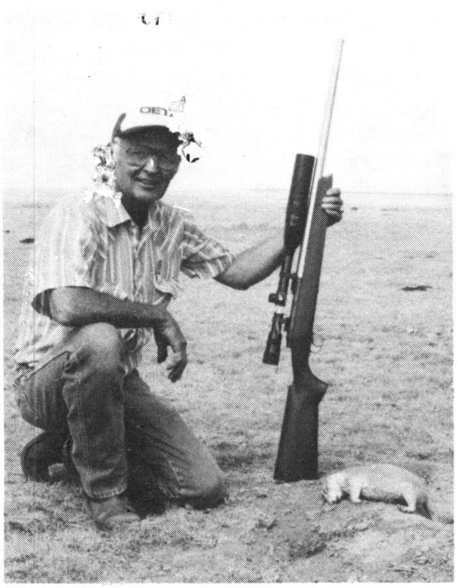

The author with his fire truck red, .250 Ackley, showing evidence of its effectiveness on prairie dogs out on the flats of Colorado.

stuck together two or three different loads that had always shot well, plus an experimental (always the experimenter...) load of 37 grains of AA2015 powder behind a 68 grain Berger bullet. This AA2015 was some I had been experimenting with in benchrest matches and had too much that needed a home. At the range the .243 Winchester shot the known loads to an average of .65". Then came the surprise package of AA2015 — several groups, all less than .4" at 100 yards, and that with the factory Remington M700! Don't play around with success... just go home and load everything with AA2015....

After running through the fireforming exercises with both the .250 and .243 Ackleys, I decided to test AA2015 in both calibers. Surprises will never cease... the .250 shot groups below .2" with 37 grains behind the Fowler 85 grain bullet and gave 3336 fps, while the .243 Ackley grouped .27" with 41 grains and a 68 grain Berger bullet, velocity of 3622 fps. Again, don't question it... just go load it. All three guns would handle the AA2015 powder, so we didn't have to carry any other type.

Trying to load 300 cases with three different loads in cases that are all too similar, late at night, before leaving on a hunting trip can be taxing... Did I put a .243 Ackley load in a .243 Winchester...? Or mash a .257 diameter bullet down in a .243 case...?

T.G. wasn't any better off. His job called him out of town all the week before the hunt. Time ran out on him, but he did decide on the three rifles to take: A Remington M700 BDL, .222 Remington caliber; A custom Mauser M98 with a premium Douglas barrel in .243 Winchester caliber; and a Remington M700 Varminter in 6mm Remington caliber. The .222 carried an old Weaver K6 scope, but the other two were set up rather well with a Bausch & Lomb 6x24 varmint scope on the .243 and a Leupold 20X on the 6mm. The crazy thing about going on a long trip for hunting when your work company claims you right up until leaving time is that you hope to get by without sighting-in, even though you load up with all different loads... So much for planning... T.G.'s loads were Hornady 52 grain bullets and 21 grains of H322 for the .222, Englebrecht 65 grain benchrest bullets and 42 grains of H414 for the .243, and 70 grain Sierra Match bullets with 47 grains of H380 in the 6mm. From this you can see that his velocities were all over the map... missed a few prairie dogs... don't know why... should have sighted-in... Are all prairie doggers this way?

Not knowing just what to expect on a prairie dog shoot we received lots of advice from the "old pros". We couldn't get by with only 100 rounds per gun. We would have to take all our loading equipment, hundreds of extra bullets and primers and several pounds of powder. After all, like they said, if

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A FIRST JOURNEY FOR PRAIRIE DOGS

Continued

T.G. Birdwell demonstrates the Hirsh Saw Table shooting bench, while Maryline and Bob watch from the far table.

you don't get 1,000 shots the trip is a failure... very interesting. Our only experience had been jack rabbit hunting with big game rifles shooting rapid fire at running varmints. Sixty rounds a day is about all you can stand. Our limited prairie dogging has been about the same, a few rather casual afternoons with a deer rifle after a deer hunt. Maybe 20-25 shots and call it a day. So we carried along all kinds of equipment.

From the telephone discussions with Cindy at the grasslands headquarters we knew the hunting area was about 40 miles out of town. There was a campground complete with no water and no electricity, but with one outhouse and a couple of covered picnic tables. She assured us the scenery was great, along with the opportunity to see antelope, white tail and mule deer, bighorn sheep, wild turkeys, coyotes... and prairie dogs. So, it was obvious to us that it would be a "rough-it" camping trip, and we were prepared: T.G. with his "sheep camp", a 33′ super motor home, and us with our "cow camp", a 34′ double slide-out fifth wheel trailer. Every time we show up out in the ranching back-country the cowboys all suggest that we leave our camps over the winter for their use. We have slept on rocks our share of the time, over the years, and worked our way up through tents, pickup campers and trailers to our ultimate RVs, and we sort of like the comforts of the better camp... maybe we are just getting soft...

Arriving in Springfield we bought our prairie dog permits, known in Colorado as temporary one day small game licenses, at a cost of $5 per day per hunter. Incidentally, we chose Colorado over Kansas partially because Kansas charges $50 for prairie dogging and the hunting in Colorado is only 25 miles away. The savings for two days and four hunters was $160. We stopped by to meet Cindy... worth the stop, guys... and gather more info before heading for camp.

The first morning of the hunt started off with 15 mph winds. By noon, 25 mph. In mid-afternoon the gusts were banging us around at 35 mph, but after driving that far to shoot prairie dogs we were not about to let a little wind blow us back to camp. Without knowing a good dog town from a bad one, we set up at the first place we saw live prairie dogs. T.G. was out and ready in a hurry with his .222 and his portable Hirsh Saw Table shooting bench. Before Maryline and I picked our spot a few yards away, he had started shooting. By the time we were set up things were quiet. We searched from horizon to horizon with our binoculars and only saw a dozen ground owls who had taken over the abandoned dog holes. About every 10 minutes T.G. would fire a shot, but it didn't take long for us to decide there had to be better places. Most of the dog holes were old and vacant and after T.G. had a total of two dogs, we packed out.

Since we were now experienced prairie doggers, the next town didn't require setting up. We saw no live dogs. All the holes were old. We studied the prairie dog map from the grasslands office and began to wonder just how old it might be... But it was all we had.

The next town proved to be alive. We all set up our benches, including my test revolving job, and immediately started getting shots. T.G. finally allowed Treabie to use a rifle...she had started throwing rocks, and was doing pretty good... and she banged her very first prairie dog. Maryline knocked off a couple while I was looking for a cinch target at a range that would guarantee a hit with the first shot fired in battle at a prairie dog with the fire truck red .250 Ackley. Was

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it enough gun for real mean prairie dogs...? I had read a lot of Elmer Keith stories in my younger days... built up a lot of doubt about the killing power of anything smaller than a .270 or .30-06 on varmints... Then suddenly there was the first dog. The moment of truth had come. I set the big B&L scope up to 24X, held carefully, judged the wind, the drop, the drift again... and touched the 2 ounce Hart trigger. The .25 caliber, 85 grain Fowler bullet exploded the dog. A fantastic shot... So it was only 90 yards, you have to start somewhere... From that remarkable start I had full confidence in the .250, and moved on to the 200 yard range. And that is when we found that we couldn't judge distance very well across perfectly flat terrain. Shots we thought were 250-275 yards would actually pace off at around 200 yards. Makes us wonder about the stories of long shots as told by the pros. After the shooting slowed down, we moved on to new ground.

The next location was a real jackpot. We drove to a windmill and pond where the map indicated a good sized town. As we approached we saw hundreds of cattle ranging from the windmill out across the dog town. The prairie dogs were scampering everywhere and some were off in the opposite direction from the livestock. T.G.'s CB radio told us he thought we had been snookered by the cows, but Maryline and I have played cowboy for various ranchers and knew that cattle would retreat from a battle line of rifle fire, so we drove over near the windmill and set up shop. After the first shot or two the cattle very obediently started drifting away and were securely out of the dog town in 15 minutes. By the time T.G. and Treabie were set up Maryline and I had knocked off a short dozen dogs, in spite of the high wind. With gusts that would bend the rifle barrels, we were becoming more frustrated over the shooting. At 200 yards we often had to hold a full dog width into the wind and even then we commonly saw the dust explode an equal distance on the downwind side of the target. We soon found that we could shoot with a headwind or tailwind and get regular hits out to about 250 yards. That is, with everything but the little .222. It had been deadly at 200, but was gone at 250. T.G. switched to his 6mm, and the dogging went on...

Maryline and Treabie proved to be an interesting pair of doggers. Maryline shoots benchrest matches with me several times each summer and hunts deer with me in the mountains every fall. On the otherhand, Treabie rarely picks up a rifle, and has never shot in matches or at big game. But along came prairie dogging... and the mild, deadly little .222... and things started changing. With the easy going .222 and the use of T.G.'s Hirsh Saw Table bench, Treabie became another instant prairie dog pro. For reasons men will never understand, women are cool and deadly shots. Treabie and Maryline blew away almost every dog they shot at while T.G. and I were busy cleaning barrels. By the time we were ready for action the two girls were right out in the middle of the dog patch inspecting their kills and later bragging about the distances and exact shot placements. Back at the benches Maryline confiscated my fire truck red .250 Ackley to try her hand with it. The first dog caught out grazing was a full 300 yards away. He was almost straight downwind so the bullet would carry well without any side drift to have to deal with. By turning the bright B&L scope up to 24X the mirage was terrible but the magnification was exciting after using only her T10 Weaver all day. When the dog finally stood up like General Custer to survey his area, it was his last stand. The dog went over backwards at the shot. His white belly shined in the bright sun

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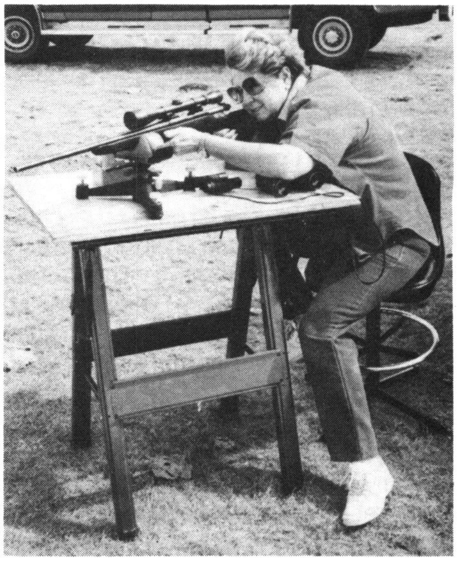

Fellows, if you take your wives, be prepared to get beat at your own game! Treabie at the Hirsh Saw Table taking deadly aim.

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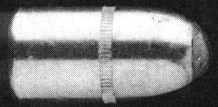

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A FIRST JOURNEY FOR PRAIRIE DOGS

Continued

T.G. doing up the chores. Barrel cleaning must be planned for in advance, and a separate table should be provided.

and we had no trouble spotting his whereabouts when we later took a break and went out to inspect him. The 85 grain Fowler bullet had made a small entry hole and the exit hole was no bigger than a 25 cent piece. The bullet was a bit hard for best varmint use at that range, but good enough. It should be great on coyotes, and it might even be hard enough for deer. I plan to try it in Wyoming next month.

After Maryline took over the .250 Ackley, I used my .243 Ackley. With the Leupold scope set at 10X the mirage problem was reduced. We had found that visibility was good with all our scopes out to about 200 yards and fairly good at 250. At 300, however, we really had trouble. Late in the day we picked out a big cactus as far as we could see through the mirage with the 20X and 24X scopes and stepped off the distance. It was 350 yards. A set of quarter-section fence posts, which would be 440 yards, was washing and swimming, jumping and bounding, through the mirage and it was totally impossible to keep them close to any crosshair. All this sure makes a beginner prairie dog hunter wonder about stories of routinely shooting dogs at 500 yards... maybe different country... cold, cloudy, non-mirage days... higher speed typewriters...

The .243 Ackley was something. The shots I had been missing at 250-300 yards were now hits most of the time. We had learned to do most of our shooting into or with the wind and crosswind shots were just guesses regardless of the caliber of rifle. I believe my change from the .250 Ackley to the .243 Ackley was easily worth an extra 50 yards, due to the several grains more powder capacity in the .243. T.G. found the same, but more so, when he changed from the .222 to the 6mm.

On our second day of shooting we checked on a dog town right beside the main road. We saw some activity from the road, but since the grasslands map indicated the dog town extended clear across the section we decided to drive in and check the unseen side. About 250 yards from the road was an earthen water tank, long since dried up. It had a long dirt pile along the side that was perhaps six feet tall. Now, in pancake-flat country, prairie dog shots become limited with distance because even the short grass and sage will obscure the view of dogs much over 200-250 yards out, and many times much closer. You need elevation. Most doggers use their vehicles for elevated shooting platforms, but when the wind blows the entire vehicle begins to rock to and fro on the springs. The vehicle becomes useless as a gun rest. Standard shooting tables don't give enough elevation, so unless high ground can be found the shooting will be limited. This dirt pile was just what the doctor ordered. We set up all three benches in a skirmish line along the top of the mound and were in business. Dogs were everywhere. They had been somewhat shot back from the road, so even the modest move of 250 yards brought us into an all new town that extended over 500 yards in three directions.

My newly designed, revolving shooting table really paid off in the big town. We could shoot out to the left till the dogs all holed up, then revolve to the center area to undisturbed dogs. After a few shots all those dogs would hole up and we would revolve the table on to the right to face more new dogs. When we got them shot up, we would revolve back to the first area where the dogs were calmed down and again venturing out

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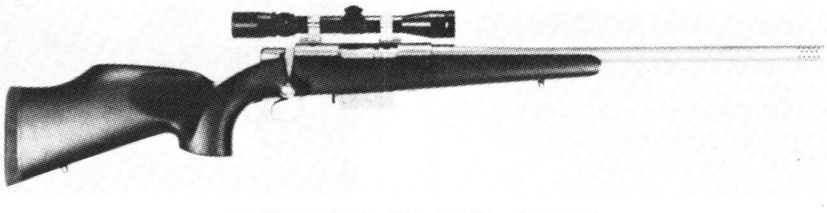

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to graze. In a big town this system works all day long. Our two other tables consisted of T.G.'s Hirsh Saw Table with a separate chair, and my handy folding shooting table with its built-in seat. These proved very stable, but unless the target was positioned pretty well to the front the shooters had to get up and physically move the tables around to point them toward the targets. It seemed that quite often the wise old prairie dog would stand up and watch the shooter move the table and then would run off to the side out of the firing line and laugh at the frustrated dogger. Are they really that smart...?

Even though the wind had calmed down to only 15-20 mph, we had learned about crosswind the first day and set up for mostly downwind shots. By turning either direction we could take all the challenging crosswind shots we could stand, and after enough misses we would turn downwind and hit a few to regain some confidence.

My .243 Ackley has a rather thin 24″ barrel, measuring .59″ at the muzzle. It will shoot three shots to beat the band. But the fourth shot will drop out of the group and the fifth will go off on its own track to nowhere. It simply can't be fired 10 times in 10 minutes and retain its accuracy. I have tested it with loads well above 4100 fps, but the barrel turns into a red hot poker quickly. Even the 3600 fps load I used on these prairie dogs would cause the barrel to smoke and radiate enough heat waves to blank out the scope after four or five shots. Therefore, I tried to space my shots to retain accuracy. The .250 Ackley has a Hunter Category heavy barrel and can stand five shots in one or two minutes quite well. Of course, it uses less powder and produces less velocity than the .243 Ackley, resulting in less barrel heat to start with.

After T.G. gunned down all the presentable targets in the first 100 yards... except for some hilarious misses... Treabie and Maryline went to cutting them down up to 200 yards. I warmed up on a couple of 150 yarders with the .250 Ackley and its 24X scope... how can you miss with this kind of set-up... and moved on to try the 250-300 yarders. At one point I had a fat dog square in my sights and was beginning to touch the 2 ounce Hart trigger when the doggone dog simply exploded. Maryline had centered him with a 68 grain Berger bullet from her .243. We paced off the shot at 280 yards. She thinks that T10 Weaver scope causes the sun to come up every day.

With the mirage building heavier by the hour we finally found that we couldn't successfully hold on any dog beyond a wind blown piece of paper that had been captured by a thorny cactus half way to Springfield... at least it seemed to be that far. Then T.G. centered a big prairie dog with his 6mm Remington close to the paper and we took the opportunity to step off the distance. T.G. needed his rest for his older age, so Maryline, Treabie and I walked it off together. It came to 310 yards, quite a good shot. Of course we told T.G. that it was only 230 yards. After all, he had his chance to walk out there, too. Before we let him start fiddling with his scope adjustments we confessed to the real range...

After that we started watching for dogs in the general direction of the paper marker so as to have a better range estimate. Soon I spotted a group of four or five dogs enjoying themselves at a range that I guessed to be beyond 350 yards based on the mirage factor. These dogs were just barely aimable through the waves and appeared to be farther out than the marker paper. I had switched back to my .243 Ackley with the 10X scope which helped calm down the mirage considerably. I set up as steady as possible, held one dog width into the slight crosswind and a half dog high. At the shot dust blew all over the target area, but the dog was still there. Another shot with more

Continued on next page

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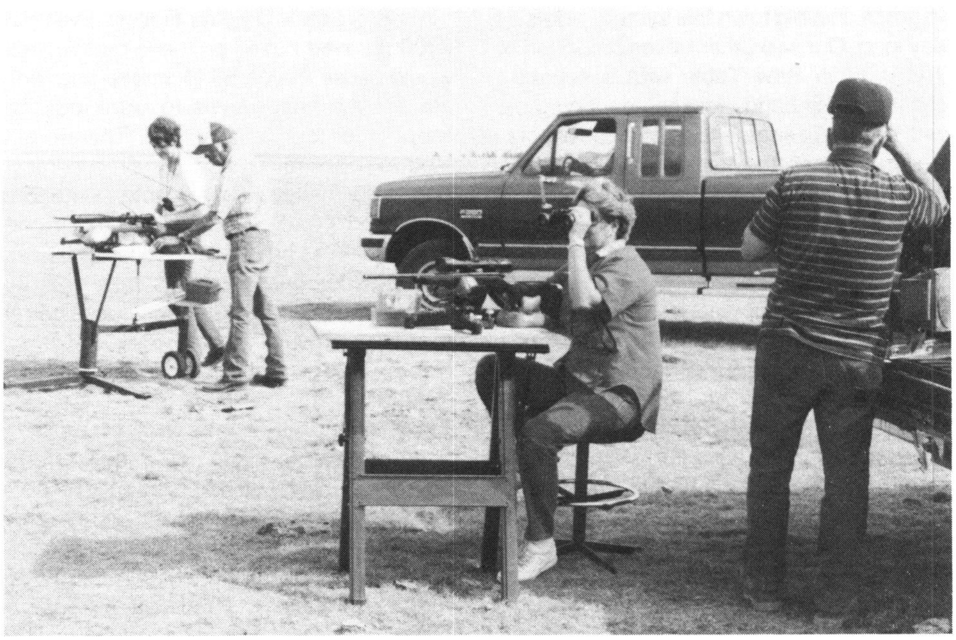
A FIRST JOURNEY FOR PRAIRIE DOGS

Continued

holdover just sent the dogs scampering around, running up to each other to see what was going on. Finally I aimed with the top of the thick part of the duplex crosshair acting as a post reticle which gave about the height of the dog holdover. A little into the wind, a slow trigger squeeze and the 68 grain Berger bullet was on its way at a bit over 3600 fps. The plump prairie dog went over backwards and when the dust cleared I could see him lying low in the sparse grass. Maryline had been spotting for me and let me know in a surprised manner that the dog was hit. A couple of other dogs ran over to check on him. It slowly dawned on me that I really had hit him. He never moved. When one of his buddies sat up next to him to study the situation I settled the post on him, moved it into the wind the same amount as I had held for the hit, and sent off the next bullet. Instantly the dog leaped into the air and fell in a heap two feet from the first one. This I had to measure. Maryline went along and we got 330 yards, the longest verified hit of the trip. We had hit a couple of others that seemed to be farther out, but we didn't go out to check. Maybe so, maybe no.

During a barrel cleaning break I asked T.G. how high he had to hold to hit anywhere near a dog at 250-300 yards in view of his unknown sight-in range. He said he didn't know, but it seemed to be about twice the height of the varmint. This accounts for his erratic shooting beyond 200 yards. He also later said he actually got more dogs with the .222 than with his other guns and it would appear then that the .222 was sighted-in somewhat better than his other rifles. Any time you have to fight a 20-30 mph wind, plus trying to estimate a double target holdover on nearly every shot, your score won't be perfect. It probably pays to sight-in... Just wait till next year...



The firing line. Maryline, Bob, Treabie and T.G., left to right. T.G. just can't figure it all out...

Some time during the heat of the battle I had switched guns after a cleaning session and laid my .250 Ackley on the edge of my rotating shooting bench. After a shot or two with the .243 Ackley, I started rotating the bench to a new target and knocked the pretty fire truck .250 into the rocks and dirt. It landed directly on the B&L scope... I couldn't believe what had happened... Only a dummy would crowd a table with too much equipment and risk the ruin of a special rifle. But there it was for all to see. I cleaned it up, cleared the table and checked it over. Nothing externally broken. But maybe internal, so I checked it by shooting at dogs. Aim right, hit far right; aim left, still hit right; hold high, hit low. Either I was so upset I couldn't see straight, or the scope had been damaged. It was retired from the hunt, and became another of my scope bug-a-boos. Back home I found the rifle shooting 8″ to the right at 100 yards, but not damaged as I proved by shooting several test targets of .2″and .3″.

All-in-all, the trip was a success. We found all the prairie dogs we could handle. And even though we were on public ground we did not see another hunter at any time. We had the entire campground to ourselves for the Labor Day weekend. We found the fun gun to be the mild little .222, and it was awful deadly as a dog gun out to 200 yards. *It could well stand more scope power, and I* believe my 3.5x10 Leupold would be just right on it. The shoot proved the value of being sighted-in at the optimum range for the cartridges being used. We could have had all our rifles sighted-in at longer ranges. And again we saw the value of heavy barrels for sustained fire when dogs are all out. Shooting tables are required for each shooter and it would be nice to have a separate table for all barrel cleaning. With all the equipment necessary to carry, it seems that two hunters per vehicle is about the limit. We found the varible scopes to be very useful in the mirage when we couldn't see with the 24X setting, but could lower the power to whatever it had to be for best use. I found mine set on about 15X much of the time. Even the 10X scopes proved to be quite useful and gave very little handicap under the conditions we were in. Binoculars are an absolute must, and since most prairie dog hunting is done in good light I believe even the small pocket models work out fairly well, if that is what you already own. If you are buying a new set, however, you should consider larger models with better light gathering ability and wider fields of view and in about 8X or 10X power.

Since one trip makes a prairie dog hunter an expert, we can hardly wait to start advising all our shooting range buddies on dog hunting. Maybe those 250 yard kills wiil grow to 400... and the 300 yarders may even become what others talk so much about, 500 yards!

We have been back home a while now with no sign of bubonic plague... I don't think... so, we just might try it again come next spring. Keep shooting while you can.

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A COUPLE OF TESTS

by

Geza Nagy

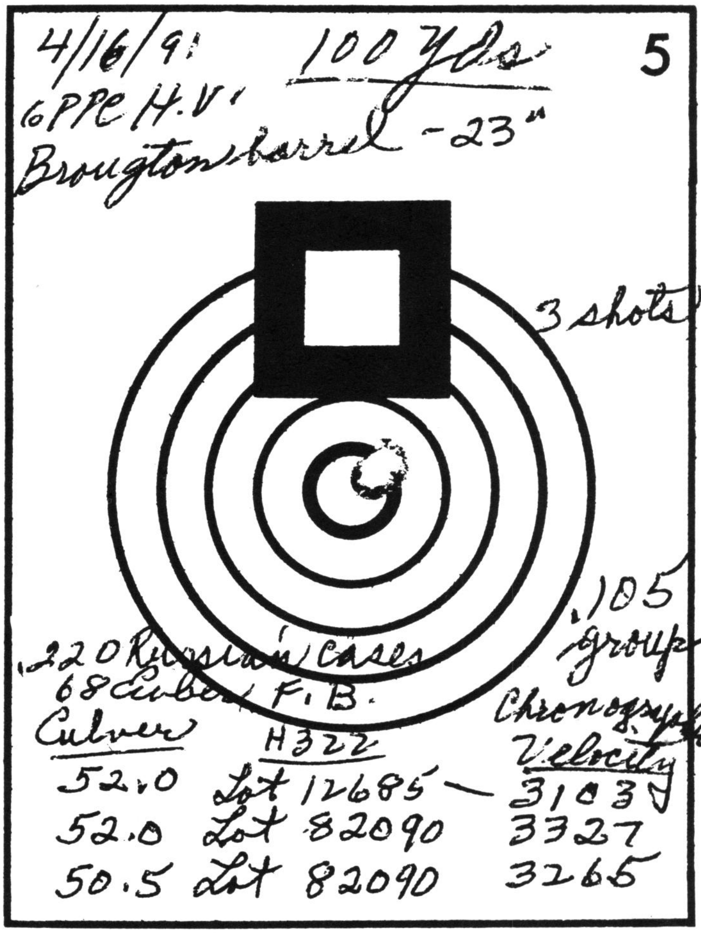
TEST #1 . . . April 16, 1991
6 PPC . . . heavy varmint Broughton barrel
Sako .220 Russian cases . . . 68 grain Euber f.b. bullets, lot #21

This started out to be a point of impact test of two different powder lots of H322 powder. The first lot was #12685; in my experience this had always shot well for me with a 52.0 Culver setting. This lot was a mild one.

The second lot was #82090. By comparison this was a potent little son of a gun. I had the chronograph set up at 10 feet, 8 inches distance, with the target frame at 100 yards. I had been chronographing other loads that day, but I had one sighter target still unblemished. My first shot was with a 52.0 Culver setting (28.2 grains) of H322, lot #12685. This shot chronographed at 3103 f.p.s.

I loaded the next shot with the same 52.0 click setting, but this time I used lot #82090 of H322. This shot chronographed at 3327 f.p.s., an eye-blinking 224 feet per second faster than the first shot . . . with the click setting the same for the charge! Don't let anyone tell you that virtually all lots of H322 are about the same! More remarkable yet . . . to me anyway . . . IT WENT INTO THE SAME HOLE! I weighed this powder charge, and with this particular lot it turned out to be 29.0 grains.

Still staying with this hot lot of #82090 I cut the load back to 50.5 clicks on the Culver measure, which gave me 28.0 grains of H322. This shot chronographed at 3265 f.p.s. Once again . . . IT WENT INTO THE SAME HOLE! The 3 shot group was now slightly oval, and measuring .105. The velocity spread for the three shots was 224 f.p.s.; with a spread of this size one would ordinarily expect accuracy to be pretty lousy. I don't pretend to understand this one.



Culver	H322	Chronographed Velocity
52.0	Lot 12685	3103
52.0	Lot 82090	3327
50.5	Lot 82090	3265

I had tried some hotter loads at 100 yards recently on windy days, and my finding was that they didn't buck the wind any better than the lighter loads that I normally used. I chronographed one load at 3386 f.p.s. in .220 Russian cases that shot a .375 group, strung out to the sides. On the same testing day I shot a .142 group in similar conditions with a load that chronographed 3183 f.p.s.

Perhaps when you get to a certain point of higher velocity you can no longer get a change in elevation **AT 100 YARDS** with the 6PPC. Possibly barrel vibrations begin to take over, and negate any changes. I strongly suspect that at longer ranges the difference in velocity would show up as elevation changes on the target.

Continued on next page

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A COUPLE OF TESTS

Continued

Several times I have tried a new powder while chronographing by starting out low, around 2900 f.p.s. I would load and shoot one shot at each graduation on the Culver setting, until I get to the point where I experience pressure signs in the load. Then I would back off on the Culver settings and start working up loads.

I intend to test the more potent load of H322 (lot #82090) in the USA cases in the future. I've done a bit of muddling with this powder lot in USA cases in my light varmint 20½ inch barrel gun; I reached a velocity of 3227. But again the grouping was spread out side to side on a windy day.

TEST #2 . . . June 5, 1991
6 PPC . . . heavy varmint Krieger barrel
Sako USA cases . . . 68 grain Euber f.b. bullets, lot #21

There had been consistently bright sunshine for the entire morning, with a cloudless sky. The winds were out of the Northeast, 10-25 miles per hour. This amounted to a mostly tail wind, with some variation in direction and velocity. Starting about 2:00 pm big puffy white clouds started to roll by, with the wind diminishing somewhat. There was still a threat of showers that had been forecast, so I decided not to put out my chronograph just yet.

I elected to work with the new Sako USA cases. I had previously chronographed some loads in these cases, but had not done any serious testing for accuracy. The case capacity was considerably less than that of the earlier .220 Russian cases. I had several lots of H322 powder with me to choose from; lots that I knew from previous experience were quite different in the velocities that they produced.

On a whim I decided to stick with the same lot of H322 (#42288) that I had used in the morning in .220 Russian cases. This lot was made to government specifications, and was on the mild side compared to some of the other lots that I had with me. I was shooting 51.5 clicks on the Culver measure in the morning with the .220 Russian cases. In these USA cases 50.0 clicks would fill the case to the top. What I did was tap each case lightly with a ballpoint pen a couple of times to settle the powder in the case before taking it away from the powder measure. This way the powder level in the case neck to about where the bullet would be seated to. I had to do the same thing in the morning, to settle the powder enough to keep the wind from blowing some powder out of the cases before I seated the bullets.

I had twelve of these USA cases that I shot these targets with. I alternated the two rows of cases. I had two sighter cases. I used .220 Russian cases as foulers. It was 2:40 pm when I shot the first group (target #1). It became overcast and too calm (Editor: it can never become too calm when I'm shooting). I was getting barrel mirage, and had to put on a paper shield after that group. And then we had a rain shower after group #1. I was shooting with a left to right breeze on target #3, and got caught in a let-upon one of the shots, thereby making a .151 group into a .352 group. After this group it calmed down again, and stayed overcast. On the last target (#6) the first four shots measured .057; the group was round before the fifth shot. The six group aggregate was .2114. The one errant shot on target #3 cost me an aggregate of .1778, unfortunately. When I was done shooting the sun came out again.

While shooting these targets I had no idea of what velocity I was getting. Curiosity being what it is, I set up the chronograph to find out. The load that I had been shooting in the morning in the Krieger barrel averaged 3068 f.p.s. in the .220 Russian cases, with 28.1 grains of H322, lot #42288. In the USA cases in the afternoon, 27.1 grains of H322, lot #42288 chronographed 3003 f.p.s. average. The ProTach chronograph was set up 10 feet from the muzzle.

Once again I have established (if only to my own satisfaction) that, when conditions are reasonably readable, better aggregates are possible with a velocity less than approximately 3050 f.p.s. at 100 yards.

Geza Nagy

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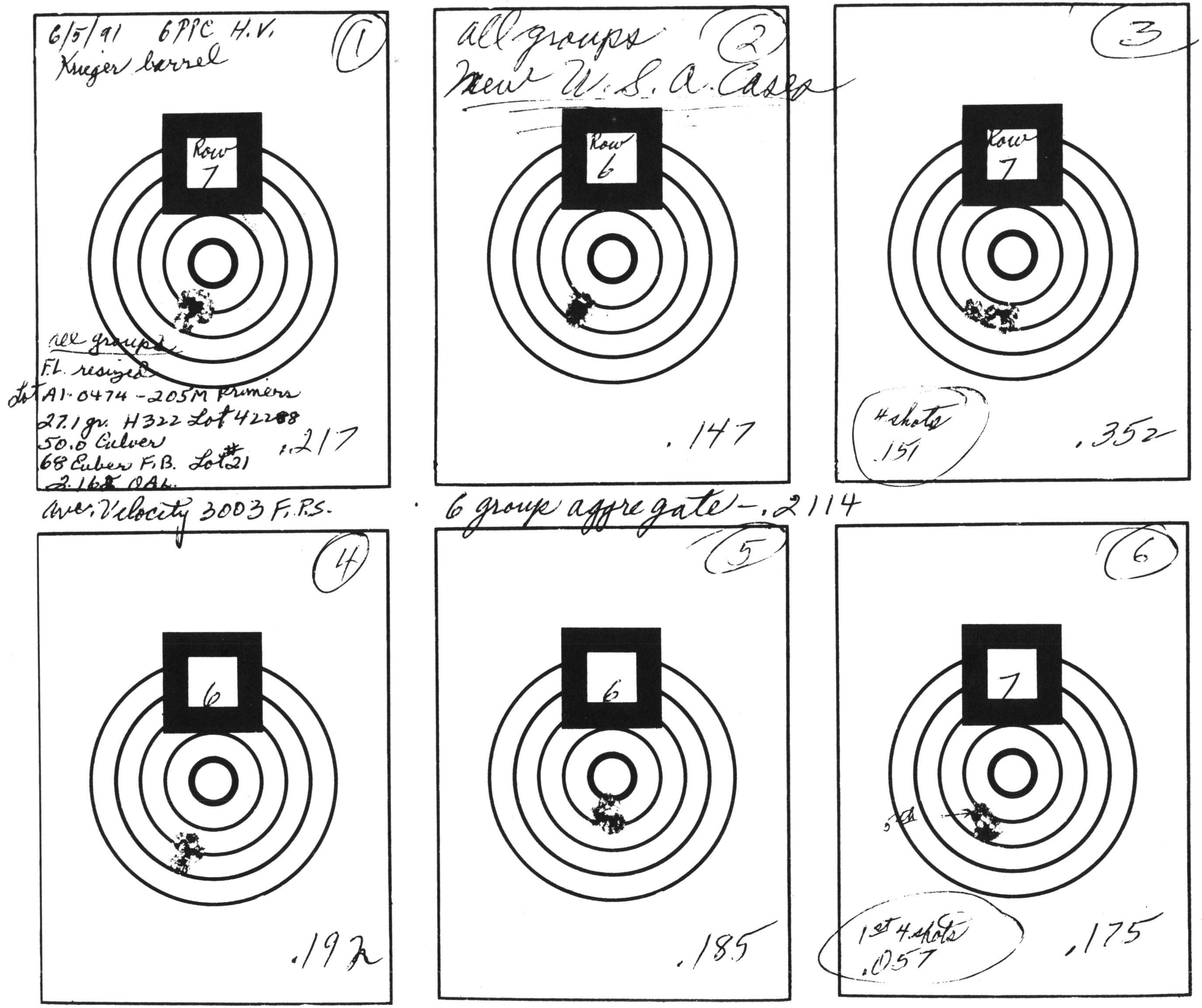

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.217

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.151

.352

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.192

.185

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.057

.175

JOE RYCHETNIK

Dear Dave,

Normally I try to slide through your mail slot with something a bit ludicrous about the shooting game, not really having the qualifications or the experience at keeping my groups under half inch at any range. Having been a shooter for sixty years and a reloader for the past thirty five, I guess I have made as many stupid mistakes in both areas as anyone.

After reading Gene O'Brien's short piece about "Primers and Oil" and his failure to get the essay published in the Rifleman's "Experience" column brought to mind another topic concerning loading bench safety that never made that part of our national shooting magazine, either.

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My bench, for many years, was a typical array of tools, equipment, and supplies arranged both on the flat table area and on shelves above for easy access. I kept powders down at one end of the main shelf and then had a long area to store various bullets into their multitude of subdivisions. The rifle safe was just steps away, surrounded by an efficient bench zone equipped with rods, cleaners, and a rifle vise.

As reloaders often do, I visit with others to watch new technology, such as the demonstration of a new powder measure. At almost every bench, the reloader had his powders of canister size arranged in order on a shelf near his work area. Some kept powders in old fridges but not many.

How many times have I (and the others I've watched) loaded a completed round into a rifle to check bullet seating or to run ammo through a ready-to-go hunting rifle. They say you shouldn't do this unless you remove the firing pin from the bolt, etc. Seldom is this ever done because of the bother.

Recently a friend, briefly distracted, fired his .223 accidentally as he was testing bullet seating. The bullet passed over the bench shelves and into the cement back wall, doing little harm to anything other than our ears and nerves. I noted that if the angle of the barrel was flatter the bullet would have zapped into the rows of stored powder canisters.

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We talked about that danger but we both heard somewhere that reloading powder was as safe as dried lentils if no flame was present. I remember watching a military instructor shoot into a stick of dynamite once to demonstrate how stable the material was. But my curiosity was aroused so later at home I found among the canisters several that were nearly empty and poured the variety of single and double based remnants into a flat sided metal powder can that was showing a bit of rust and topped it off to overflowing with some shotgun propellant I had to spare.

At about $15 a pound, shooting powders are not cheap enough to waste. The overflowing can was tapped and when the powder level allowed capping, I tightened the screw lid down.

Our private shooting range is up a small canyon away from most residential areas. I chose an afternoon when no one was using the ranges (there are four positioned about) and found a rotted out section of telephone pole near the 100 yard target butts and jammed in the powder can, flat face out. The section stood about three feet off the ground and was easy to sight in on. I fired one shot from a bench rest 105 yards away with a Remington 721 and a 50 grain Hornady soft point that was an accurate hunting round.

There was an explosion down range equal to what I would expect from one stick of 60% dynamite. It blew the section telephone pole to smithereens and there was no trace of the metal can. The detonation rolled down the canyon and caused comment from neighbors who thought someone was blasting rocks or stumps. It was more than I expected. I later filled a half pint paint can with powder remnants and tapped the lid down and got the same result — a lesser but quite grenade-like explosion.

I now store my powder canisters several steps away and around the corner from my loading bench. I also step out to the back yard when I check bullet seating or other questions involving loaded ammo and ready to shoot rifles. I hazard to think what would be left if a row of ten nearly full powder canisters were pierced by an accidental discharge at my bench. As for suspect primers, they've always gone into my neighbor's trash bin, usually on a moonless night.

Keep up the great PS! Don't know how you keep up with friend Merrill Martin, the Mad Manipulator.

Best regards,
Joe Rychetnik
943 Egan Avenue
Pacific Grove, CA 93950
(408) 373-8120

STOP YOUR BLOODY COMPLAIN'N

John J. Gammuto

After reading Jerry Faul's article in the April '91 issue relative to the cost of getting started in benchrest shooting, I thought you might be interested in how things compare Downunder. I took Jerry's list and added Australian prices to it for your comparison. As you can plainly see we pay almost double for the same equipment.

COMPONENT	US PRICE	AUSTRALIAN PRICE
Organization Dues and magazine subscription	$ 30	$ 65
Used benchrest rifle (accurized Remington) with scope	$ 950	$1800
Front Rest & rear bag	$ 150	$ 165
Bullets - 1000	$ 110	$ 280 (average)
8 lbs. of BR Powder	$ 95	$ 168
Primers - 1000	$ 22	$ 48
Bore Guide & Cleaning Rod	$ 35	$ 43
Cleaning & Maintenance Supplies	$ 50	$ 70
Lee Auto Prime w/ holder	$ 18	$ 28
Redding Br Powder Measure	$ 74	$ 137
FL Sizing Die	$ 19	$ 46
Wilson Seating Die	$ 32	$ 85
Wilson Neck Die w/ bush'g and base	$ 40	$ 120
TOTALS	$1625	$3055

OTHER ITEMS OF INTEREST

COMPONENT	AUSTRALIAN PRICE
Eley Tenex	$12 per 100
Custom Products Rimfire Gauge	$75
6mm PPC Cases - 20	$30
GI 322 Powder 1 lb.	$28
Hart 2 oz. Trigger	$195
McMillan Fiberglas Stock	$260
Leupold 36X Scope	$869
S/S Match Barrel	$310-350
Marquart Neck Turner	$105
Weaver Rings & Bases	$50

Of course, these prices mean nothing until wages and the cost of living are brought into focus. What does a tradesman earn in a week in the states? As an electrician (sparky down here) I earn $515 for a 38 hour work week. Out of this I pay $88 in tax. Petrol (gas) costs .66 per litre ($2.97 US gallon). A good T-Bone costs $10 a kilo and a litre of milk .97. To go to a shoot and stay overnight would cost $40-$50 for a hotel room suited for 2 people (no breakfast).

As you can see, I have to work approximately 2 hours to earn enough money to purchase 1 lb. of powder. Is there any wonder why I drool over the prices I see advertised in Precision Shooting?

Yours Sincerely,
Gary Manteit
Queensland, Australia

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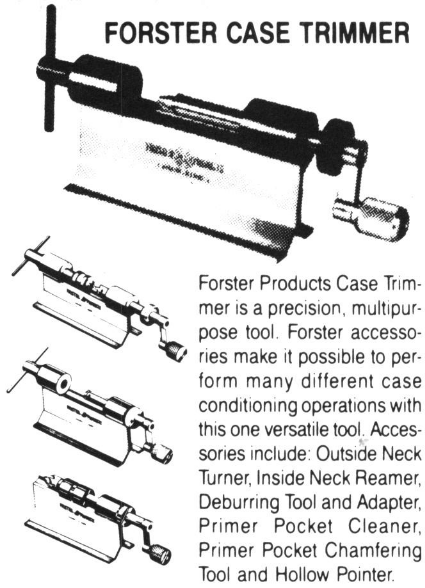
FORSTER CASE TRIMMER



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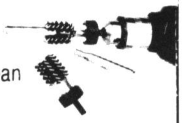

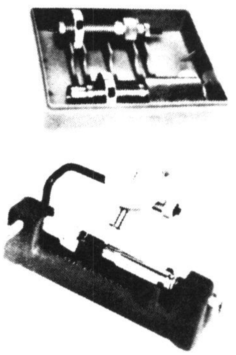

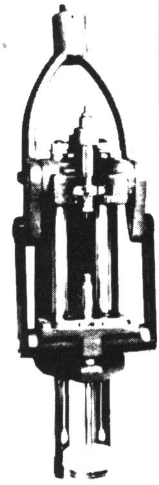

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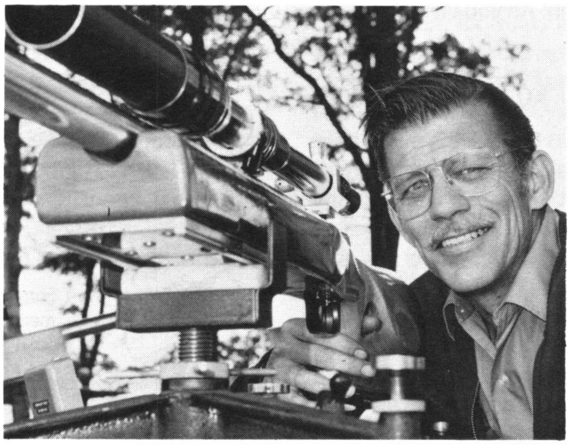
ON MANY THINGS

by

Lt.Col. Rick Hornbeck



Some riflemen have difficulty getting their rifle sighted in, and spend a great deal of time, effort, and ammo whenever the onerous chore has to be done. There's an easy way to get it done with just one or two shots. (Editor: What? And take all the fun out of it!!!). It is somewhat easier to accomplish if the scope has target knobs, and if we can work off a good stable rest or sandbags.

The average benchrest competitor does it with a single shot when changing ranges (100 to 200 yards, or vice versa). Even the editor handles this without trouble. (Editor: Once again we find ourself being used as a yardstick for the judgement of relative incompetence). After finishing the 100 yard stage, the necessary adjustment for parallax is completed as the first step in preparation for going to 200 yards. The target knobs are left alone at this point in time. We know that our first shot at 200 yards will be below our point of aim. A point of aim is selected high . . . usually the bottom of the aiming square, and a single shot is fired. Bullet impact is expected down at the ten ring, or a little below that. The crosshair is held at the point of aim at the bottom of the aiming square, and the crosshair is moved down to the bullet hole, along with any needed windage correction. The next shot will be found to be at the point of aim. Sight-in is completed at this point.

The same procedure can be done with any rifle. With a hunting scope and its standard knobs, two people can do it with more accuracy than one, since the knobs are somewhat harder to adjust. One holds the rifle, and the other does the adjustments. If we are installing a new scope and have no bore sighter, we can bore sight through the barrel and adjust the scope accordingly. The more experience that we have bore sighting through the bore the better the success level. (Editor: some souls are remarkably good at this. Myles Hollister and Seely Masker are two names to come quickly to mind. Have you ever noticed how nice we always are to Myles and Seely? One simply has to stay on the good side of people with very useful talents like this. Never know when you're gonna need them . . . badly!). If no shot shows up on the paper (Editor: it never does) it's time to set up a target at 35 to 40 yards and get the crosshairs to the impact point. Any sort of a target can be used. Nothing fancy required. Mark a point of aim in the center, and fire the shot. Hold on the point of aim and move the crosshair to the bullet hole. The next shot that you fire at 100 yards will be on the paper, and a repitition of the same procedure will finish the job nicely.

WILD SHOOTING PRODUCTS VANE SYSTEM

Any rifleman that ventures forth to the rifle range to sight in, check some loads, practice generally, or try for more accuracy . . . who goes without wind flags is wasting both time and money. Without wind flags, range conditions remain unknown. The flags do not have to be fancy. Glenn Newick's book "The Ultimate In Rifle Accuracy" is a good place to start learning what wind flags are all about and how to use them. But, from my point of view, all flags used should be the same . . . so that a given amount of wind, or a change of wind will be indicated the same, regardless of the flag's location on the range. We all tend to look too far down range, and/or give the flags close in front of us too little attention.

It's simply great to have three or four custom made wind flags to use. All will operate the same, and if properly designed, will show us what we need to know when dat ole debbil wind is kicking up a ruckus on the range in front of us. Wild Shooting Products Vane System is worth looking over. I have used them for several months now with a level of success. They offer something for every taste; the conventional vane . . . or daisy wheel . . . free-standing . . . or push-in mounted. It would take a full page to cover all the different models that are available. Best idea is to call or write for the complete listing.

There is very little over-travel-coast with these flags, which dampen out promptly. If you shoot at ranges with rocky soil, or very uneven ground, the tri-leg-stand base is probably the way to go; it will take a lot of wind before it goes down. (Editor: intelligent people stop shooting . . . or don't even start shooting . . . when there's "a lot of wind"). For softer ground the push-in base will work just great. We suggest that you might want to get a call or letter off to Grant Wild, 8810

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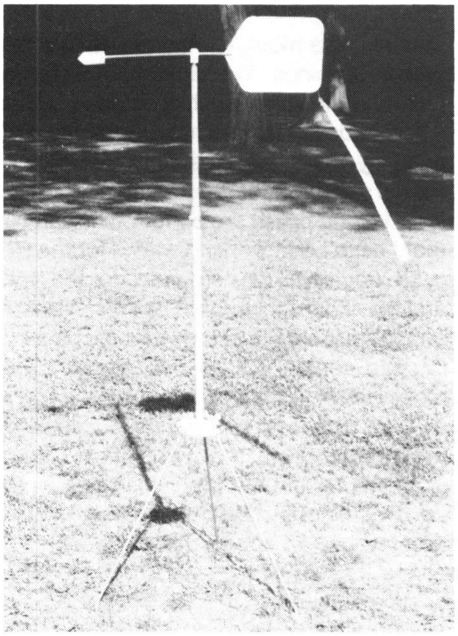
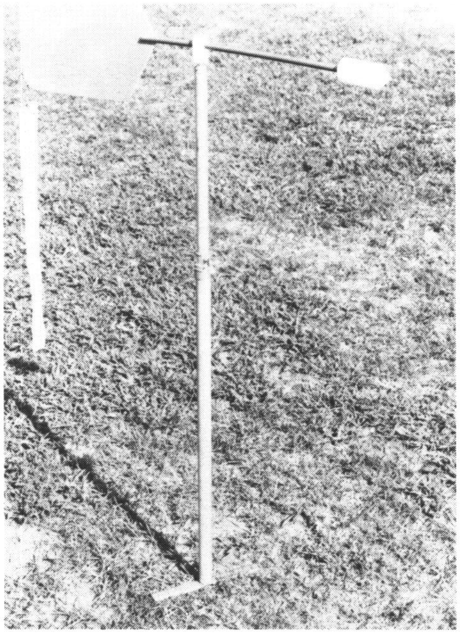


Wild Shooting Products windflag (free standing).

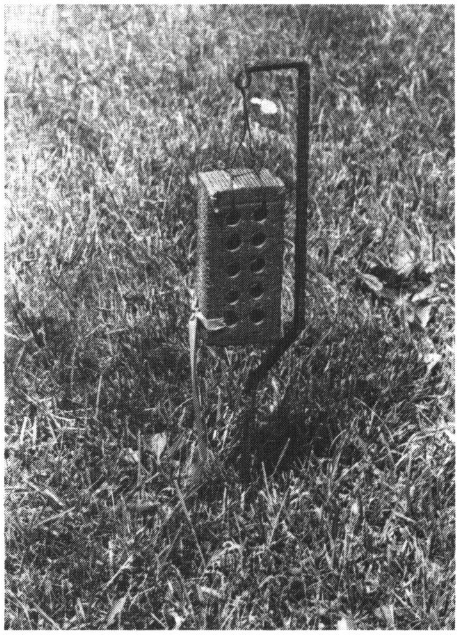


Wild Shooting Products windflag (push-in type).

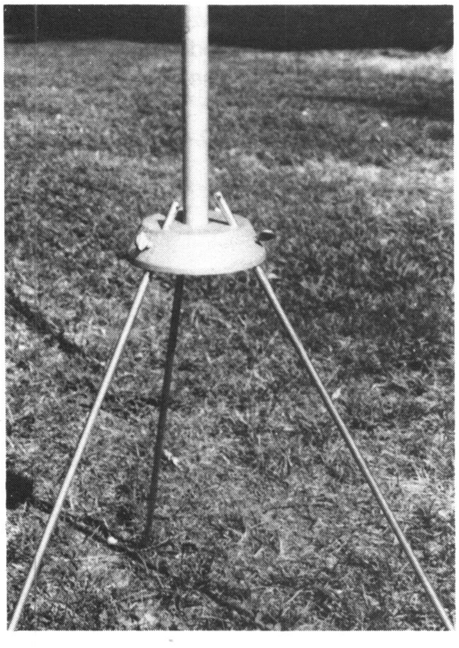
Cross Road, Horton, Michigan 49246, (517) 563-8294; ask for a catalog and order blank.

We also have herewith a photo of a NEW wind flag, first noticed by us at this year's Super Shoot in front of bench 13, and which made a subsequent appearance at Painted Post in July. I have it on good information that this unique wind flag is made by The Precision Brick Company (no relation to Precision Shooting, although from studying the item closely the intellectual capacity that brought it into being has a lot in common with the PS staff). (Editor: I can only take my hat off to the fellow who brought this remarkable product to market ahead of us. You caught us napping there, fella! Good job!). The model shown in the photo is their deluxe ten hole model, with accessory wind ribbon, and rough weather mounting. It seems that they are having a few production problems, so this wind flag is not yet available, unfortunately. (Editor: rest assured that PS magazine is monitoring developments closely here, and as soon as Precision Brick Company is able to begin shipments you will be the first to know). Photo courtesy of Fletcher Williams.

Continued on next page



The remarkable Precision Brick Company windflag development.



Wild Shooting Products windflag base (free standing).

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ON MANY THINGS

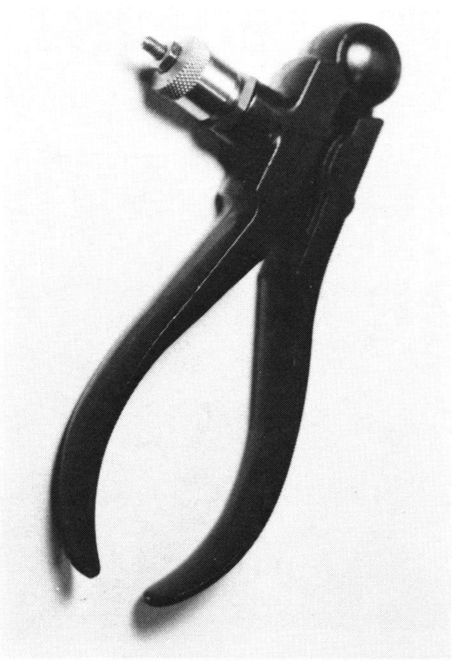
Continued

BOLT CLOSURE AT IBS MATCHES

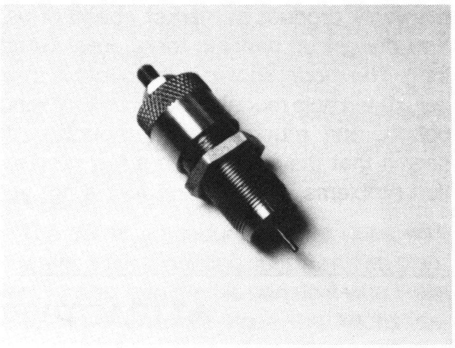
Over the past shooting season we continued to note shooters closing their bolts before the "Commence fire" command. The rule book tells us that we can insert the bolt in the action before the command, but the bolt should not be completely closed before the command. Range officers and referees are becoming just a trifle short of temper with competitors who insist on closing their bolts completely before the command. It seems to me to be a real dumb way to disqualify one's self! It is a range safety item, and therefore a real no-no! We CAN put the bolt in the action at the range officer's command. We CAN put the first round into the action. We MUST wait for the "Commence fire" command before we close and lock the bolt.

310 DIE DECAPPING PINS

In recent days we have had several phone calls in which the caller complained about decapping pin breakage in dies mounted in the Lyman 310 tong tool. The problem is the outgrowth of die mounting in the tool and/or the case flash hole size. First, the die should be adjusted so that the decapping pin just makes the spent primer clear the case head. These pins are standard pins, of the type used currently in all Lyman dies. The second item that can cause pin breakage is the fact that some makes of brass have very small flash holes. This is true of brass made in other countries, and will also be found in some lots of Federal 30 American cases. As a rule, if the flash hole is deburred with a deburring tool, or opened a few thousandths with a number drill, the problem will cease and desist.



The Stohner decapping-sizing die, mounted in a Lyman 310 tong tool.



The Stohner die, without 310 tool.

A 310 tong tool that yours truly is currently working with is one made by Floyd Stohner, an active benchrest shooter for many years, and a crackerjack machinist. This die, like most, is made to accept the Wilson bushings. The die is darn well perfect, and the sizing bushing is dead center when in use. This die has a lock nut and adds an additional adjustment capability to the die assembly for total length. Workmanship, fit, and polish are perfect. The sample that I have been working with is for the BR case. Additional dies are made for the PPC and the .222 Remington. The Wilson dies fit on the snug side to assure that the bushing is dead center. Things have to be clean when installing the bushing in the die body, or it's not going to go. If something develops a burr a quick pass or two with a crocus cloth will correct the problem. The die can be ordered from Bruno's Shooting Supplies, whose ad appears monthly in the PS pages. The die with a Lyman 310 tong tool costs a reasonable $75.00; the die alone is $59.95. They can also supply whatever Wilson sizing bushings you might want, as well as spare Lyman decapping pins.

SHOOTERS CHOICE WENT TO WAR

During last fall, when Operation Desert Shield was getting into gear I was on the phone with Joe Ventimiglia at VENCO. The hot item around the plant was that they were getting phone calls from the troops in Saudi Arabia wanting Shooter's Choice MC#7 bore cleaner and Quick Scrub. For sure there wasn't going to be time to get all the paperwork done and processed for a government purchase order before the shooting started. Once arrangements were made to get the product shipped over to the troops in a timely manner VENCO simply donated thousands of both products to our troops in the Middle East. During March the Pentagon sent Joe and VENCO a note of gratitude. This was a very substantial expense to these folks, and we should all offer a "Well done" to these fellow benchrest shooters.

END

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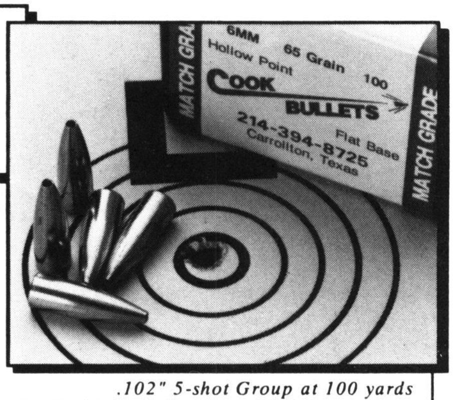

.102" 5-shot Group at 100 yards fired with Cook 6mm's at 1991 Super Shoot

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TCL
Ameri-Con-News
American Conference, Transcontinental Hunter Rifle League

Terry Meyer, Co-Director
R. R. 1, Box 50
Thornton, Iowa 50479
(515) 998-2860

... And following a sporting chase, the pack feasted.

Five competitors showed up (for the shoot-off) in full control of their faculties – via determination, concentration, and "calm under fire" they lead their respective teams in the quest for ultimate glory . . . the American Conference Championship. For Cody, Wyoming, Chuck Baraby and Frank Phillips posted identical 250-14X targets; for Mainville, Frank McKee also delivered a 250-14X. Rocky Baptiste spurred LaGrande, Oregon via a 250-10X; John Havens for the Coyotes, Northern Colorado, made off with the backstraps – 250-15X! Gentlemen, take your bows!

Mainville has set the standard for yet another season – all of their scores were fired at registered matches. The Pack has proven its ability to trail victory over the most barren terrain, sniffing the last molecule of scent from rocky crevises until the quarry is jumped and the "race is on."

One can only watch in terror as the Pack devours another lamb before the long winters sleep.

Stay tuned to the American Conference season wrap up report, complete with photos of the ugliest people you ever saw.

For Hunter Rifle Competition
R. G. Robinett

The Champions!
Mainville Sportsmans Club

Frank McKee	30 Aardvark	250-14X
Alan Kogoy	30-30	249-8X
Erwin Shinkle	30 SFG	249-9X
Gary Long	300 HBR	248-12X
Todd Fritz	30-30	247-7X
	TOTAL SCORE	1243-50X

2ND PLACE - NORTHERN COLORADO

John Havens	308	250-15X
Don Mulall	308	249-10X
Hal Toland	308	248-10X
Larry McDaniel	30 SP	247-10X
Chuck Barber	308	246-9X
	TOTAL	1240-54X

3RD PLACE – CODY, WYOMING

Chuck Baraby	30 Short Chuckie	250-14X
Frank Phillips	308W	250-14X
Ron Kent	308W	248-10X
Hal Romich	308W	244-9X
Jerroll Wolf	6mm/Wolf	243-6X
	TOTAL	1235-53X

4TH PLACE – LA GRANDE, OREGON

Rocky Baptiste	250-10X
Larry Bryant	249-12X
Larry Cribbs	249-9X
Florein DeJeane	245-7X
Dick Hildreth	242-6X
TOTAL	1235-44X

5TH PLACE – VAN DYNE WISCONSIN

Lee Keller	7mm IMP	245-8X
Marty Stenback	7mm IMP	245-4X
Jim Angle	308W	244-10X
John Puhl	7-08	244-8X
John Miller	30x44	244-6X
	TOTAL	1222-36X

THE FIRST WORLD BENCHREST CHAMPIONSHIP — THE BEGINNING

by

Skip Gordon

What I **should** have done when Walt Berger called was hang up! My first mistake, having answered, was to ask "What's up?"; the second was letting him tell me; and the third was agreeing to go along with his proposal that I organize U.S. participation in the World Benchrest Championship planned for October 1991, eighteen months in the future.

On the other hand I had been in print ten years earlier urging just this kind of gathering, so there was a certain degree of enthusiasm. And, in spite of past experience that **should** have served to modulate my optimism, I was reasonably confident of support from the shooters; after all, here was the chance to shoot as representatives of the U.S. IBS/NBRSA benchrest community.

Publication of the qualification methodology brought forth no protests, or at least none were brought to **my** attention. What could be more fair; shooters would receive one point for every competitor they beat in the LV-HV 2-Gun at our three major events — the 1990 Super Shoot, and the 1990 Association National Championships.

The original press release announcing the W.B.C. and soliciting financial support for the U.S. team spelled out the rules, and gave basic information, including an estimated cost of $2500 per person for the ten days in France (based on the air fare from New York).

There were indicators throughout the 1990 season that all was **not** as I hoped it would be; there was virtually no enthusiasm for the project, and a (to me) surprising **hostility** in many quarters. Apparently I was never without my rose tinted glasses last year, and I attributed the general disinterest to the WBC's being a year in the future.

In January of this year — 1991 — we published the ranking of shooters, based on the aforementioned 2-Gun performance. And suddenly the extent of U.S. shooter apathy was apparent . . . even to me! Of 46 shooters with 250 points or more — our best in 1990 — exactly 11 showed any interest in going to France, and two of these ultimately backed out! (Sometime in the future the WBC will be held in this country. It will be interesting to see if the attitude toward world class competition changes when the U.S. shooters don't have to play in someone else's pen.) Obviously, some of our top guns simply could not handle the expense, and this is certainly understandable. On the other hand, some of those who couldn't be bothered might be able to plead colossal disinterest, but certainly not a shortage of funds. (I'm giving good odds that when the WBC is scheduled for Arizona, or Ohio, or Pennsylvania, a lot of these folks will not be quite so cavalier and will, in fact, be doing their very damnest to make the U.S. team!)

I was also unprepared for some of the personal attacks, including one assault upon my ethics. It seems this individual felt there would have been more interest if we had announced originally the team would receive financial support. This same person did not seem to grasp the concept of **team** competition, nor the need to field a team selected on the sole basis of **ability**. (For what it's worth, we had foreseen receipt of a certain amount of support, and the $2500 took that anticipated income into consideration.) There was a time when I would've gone to war with this man, but it seems hardly worth the effort anymore; after all, I know I've paid **my** dues, and though I've not lacked critics over the past twenty years, no one has ever questioned my moral principles or values.

While not at a level we might have wished, or even expected, there **was** support for the World Benchrest Championship team, and the consideration, generosity, and support received gave the U.S. shooters a real lift. All told about $5500.00 was received; it went for registration fees, team patches,

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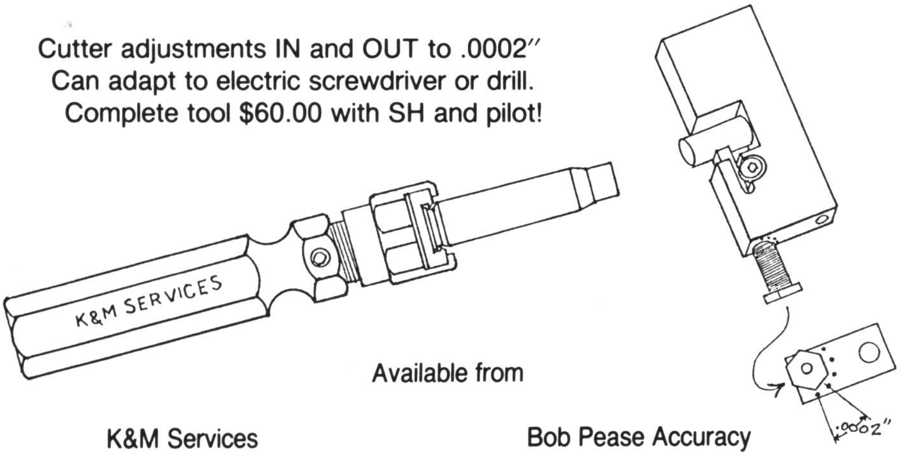

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INDIVIDUAL CONTRIBUTORS

Gary Coffman, Joe Emanuele, Gerald Gibbon, Robert Gideon, James S. Greer, Stephen Guardino, Richard Hain, John Hollister, Myles Hollister, Ron Hudson, Richard Jenkins, Sev Kempner, Todd Kindler, Michael J. Lucas, Kevin Maher, Paul Mullen, John Murphy, Ed Owen, George Partezana, Robert Sandager, Phil Sauer, Dr. G.C. Schaefer, William H. Smith, Richard Taylor, Lou and Gini Turch, Joe Valentine, Jim Venier, Ernest Walker, Ray Wight and Rollin Woodford.

Additionally, Lester Bruno built and raffled-off a rifle that netted $970.00. This was a super effort, and everyone is most appreciative of Les' efforts, as well as those of the folks who contributed to the project: Kelbly, Inc. (Stolle action); Hart Rifle Barrels (6mm barrel); Hall Manufacturing (stock); Lowell Frei (stock finishing); Arnold Jewell (trigger), and Clarence Hammonds (chambering).

Glenn Newick designed and had manufactured enamel pins which he sold at matches throughout the 1991 season. Monies earned from their sale were used to purchase distinctive jackets for each member of the team, also handled by Glenn.

There are, of course, a mob of anonymous donors — the men and women who purchased the pins, and those who took chances on the P.A.S. actions. We don't know who you were . . . but thanks.

Incidentally, we did **not** solicit funds from anyone going on the trip.

Finally, the help and support received from a few people should be acknowledged. Pete Callan, who once again came through with a super patch. Walt Berger, who accepted the political and diplomatic responsibilities encumbent upon the Head of Delegation. Herve du Plessis and Carlos Pacheco who, during the early going particularly, were on the phone or FAX machine with **FAST** replies to a multitude of questions. And finally, Pete Hammerich, who served graciously as translator and "expiditor".

Next time around? The next international gathering is tentatively scheduled for Finland in 1993. I feel it is still desirable to have a team with membership based on performance. Barring this, perhaps a committee could be set up to select twelve shooters who voice their interest in participating. This latter method would certainly eliminate a lot of administrative hassle; the drawback, of course, is trying to get **anything** accomplished with a committee. We would suggest someone start making plans now, however, as a year and a half will go by very quickly.

LEFT THE RANGE

JIM SMOLA, of Ross, North Dakota, passed away on June 17, 1991, at the age of 77. His death was reported to us by Dennis Gustafson, who writes . . . "Jimmy was the one who influenced most my getting started in benchrest shooting. He was always willing to help anyone who needed it. Jimmy was a great machinist and loved to build his own rifles and loading tools. He loved the sport of benchrest shooting and the people who participated in it. He will be greatly missed. He is survived by his wife, Geri, who had attended many matches with him."

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Preregistration or notice of intent would be greatly appreciated.

Being a tourist area, there are motels in abundance
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FOR MORE INFORMATION CONTACT
Tony Hidalgo, Sec./Treas.
(305) 476-7645

FREJUS, 1991

Dear Dave:

I'm sending along some pictures from the festivities at Frejus, earlier this month, just in case someone didn't get the opportunity for better photos. Things were rather hectic at times and after spending several hours, each day of the matches, at the range, I managed to burn up two rolls of film and hopefully get a few that were impossible for others. On the back of each photo is a number and I have written a comment about each that corresponds.

My wife and I timed our 6 week vacation in France this year to take advantage of being in Frejus, staying at the same motel as most of the US team members and a lot of the other competing teams. Needless to say, attending our first benchrest match and seeing the cream of the crop doing their thing was a joy.

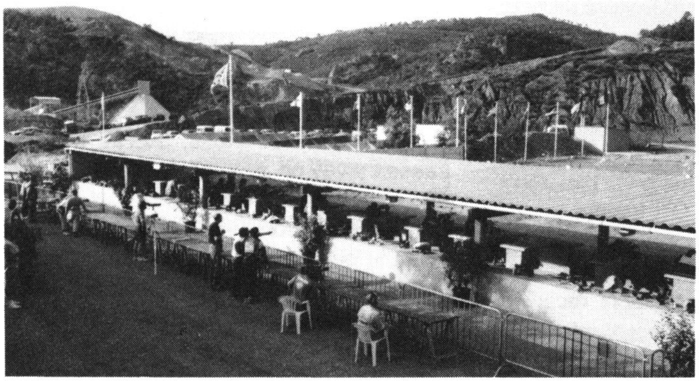
Both my wife and I are eternally grateful to these people for putting up with our prying camera and inquiries during their busy schedule. We both came away with an impression that it would be impossible to find a friendlier or more cordial group of individuals anywhere.

Well, that's it! Keep the photos. File, use or dispose of them. I have the negatives and a lot of beautiful memories.

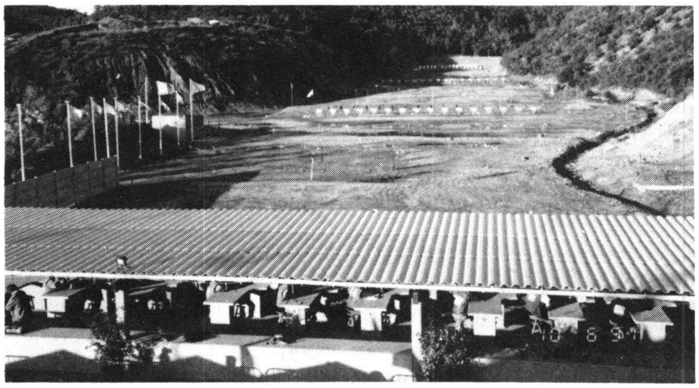
If anyone would like a print of any of these, I can be reached at the following address, or I'll loan the negatives if someone wants to do their own.

I remain your very impressed and grateful IBS member,

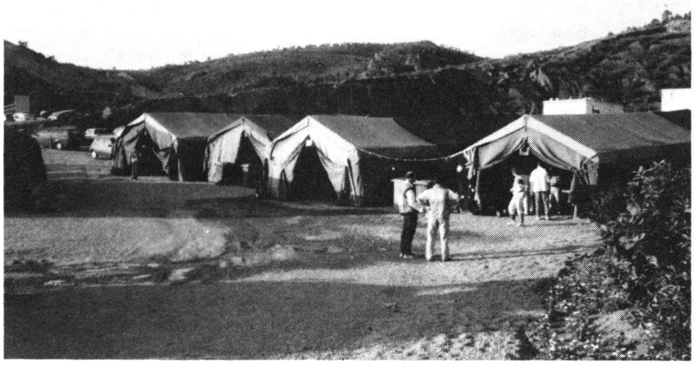
Dick and Mary Jo Jenkins
2687 North 3rd Street
Springfield, Oregon 97477



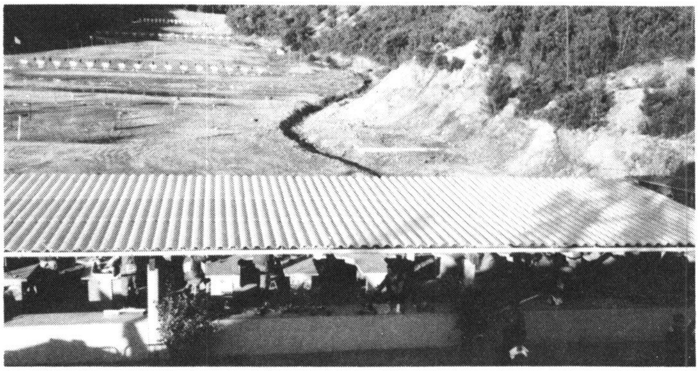
Overall view of the range from the hill behind the firing line during the 100 meter stage. (Shilen at left spotting cope).



Almost the same shot on the last day of shooting at 300 meters. (Note the flags in each picture).



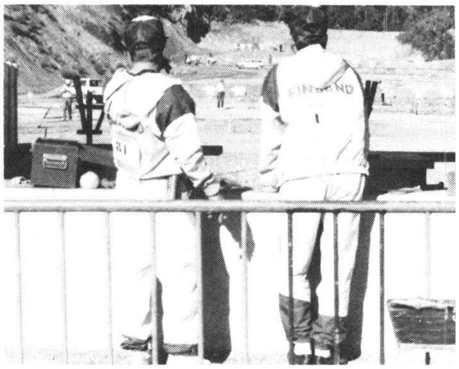
Tent City!



Nearing the last relay of the 300 meter match (note the shadows in the upper left hand corner and the firing line almost in the shade).

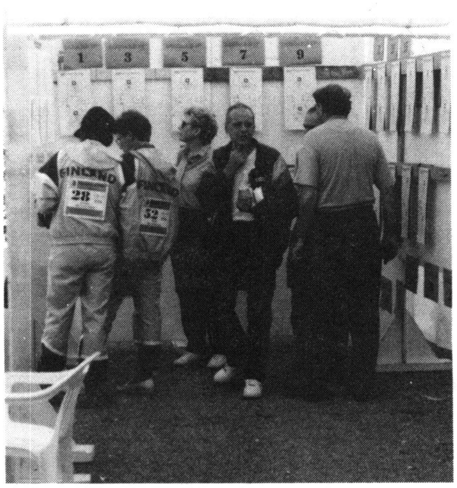
Eric Nielsen of the Australian team on firing point 1.

Walt Berger on firing point 14 or 15 waiting for the clock to start.

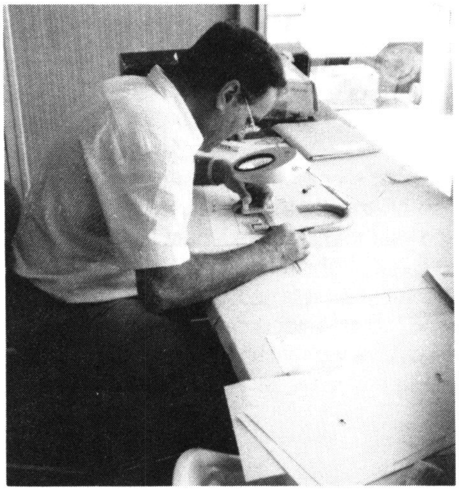


Two members of the Finnish team setting up wind flags the day before the match. (Walkit-Talkies?)

The target team, stationed at about the 100 meter line.



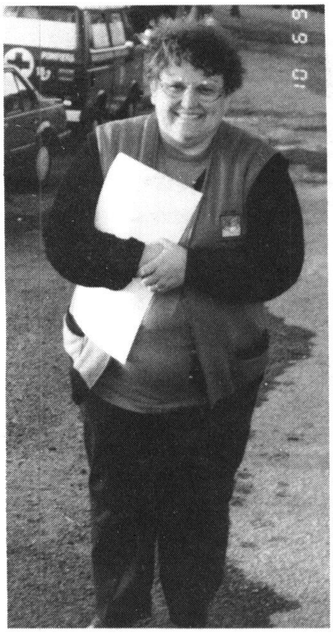
When I shot competitive pistol, we called this the "Wailing Wall".



Scoring shack.

What they came there for!!

Doc Palmisano, Walt Berger and ?, discussing Ballistics, Wine and Wind.



One happy and somewhat chilly Faye Boyer, clutching her world record target. Whata gal!

Brad Rosenthal after his win at 300 meters, cigar in one hand and a cup of ????

The victors and a group of very happy people. (Left to right) Tony Boyer, Who's behind him???, Walt Berger, Glenn Newick (behind Berger), Lew (Smiley) Murdica, Brad Rosenthal (behind Murdica, holding trophy), Faye Boyer, George Kelbly. The other four are the French team and I'm ashamed to say I didn't get their names. It's after dark and getting chilly. Note the flags blowing! That's what the French reverently refer to as the "Mistral", a word that I'm sure most of these people began to respect after 5 days of shooting.

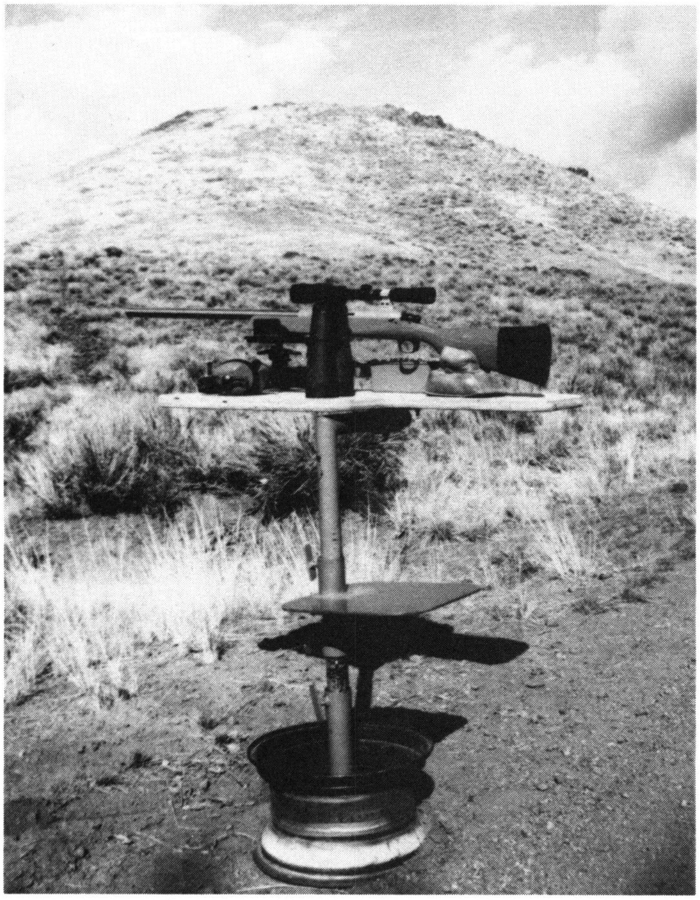
A Season With the JRW Port-a-Rest Bench

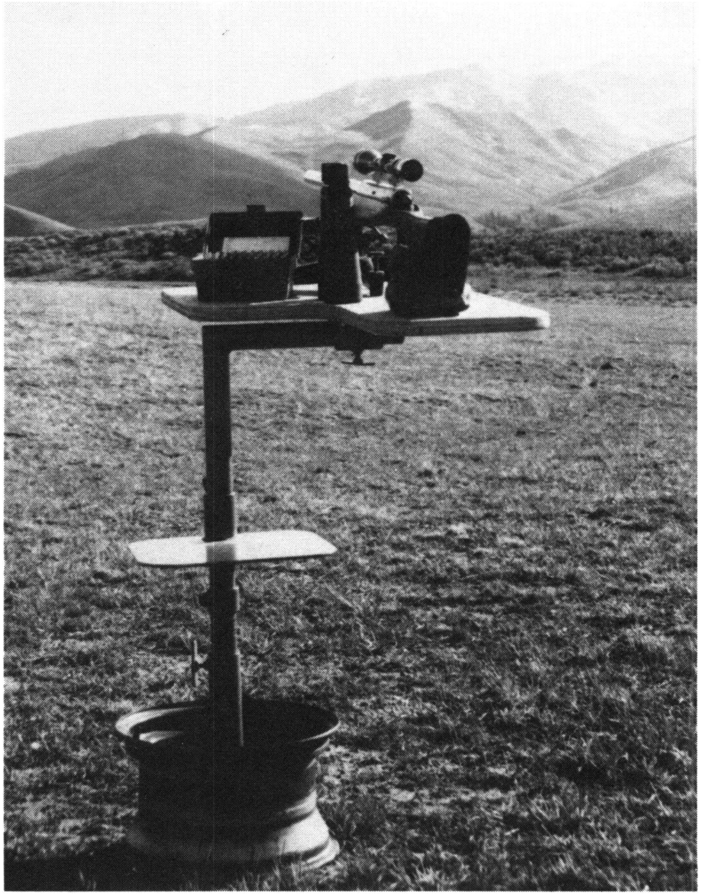
by Richard Kayser

About six months ago I had a sketchy report on the JRW portable shooting bench, and said that I'd have a detailed discussion with you all after shooting off it for a season. I have used it this season on an antelope as well, and also got some input from a dozen or so other varmint shooters who visited this spring and summer.

In a nutshell, it gives the shooter a similar degree of accuracy to what most rifles can deliver from a concrete bench. I made three trips to the range this summer testing the Banshee with the new 110gr Fowler bullets and a couple new powders. In every case, I could make 5-shot groups that measure within .050″ or so of groups off a solid concrete bench. It went with me on seventeen Rockchuck shooting trips this year in the back of the pickup. I even borrowed my wife's Geo Metro 2-door one run to see how portable it really is.

I mentioned in an earlier issue that I joined the 800Yd+ club this late June with the Banshee. I made first-shot hits on two


A side profile of the rest, with about 1270 Yards of Rockchuck country between it and Camas Butte.


A look west at the backside of Sun Valley, Idaho. The rest is sitting on a bare rim because I had the spare down.

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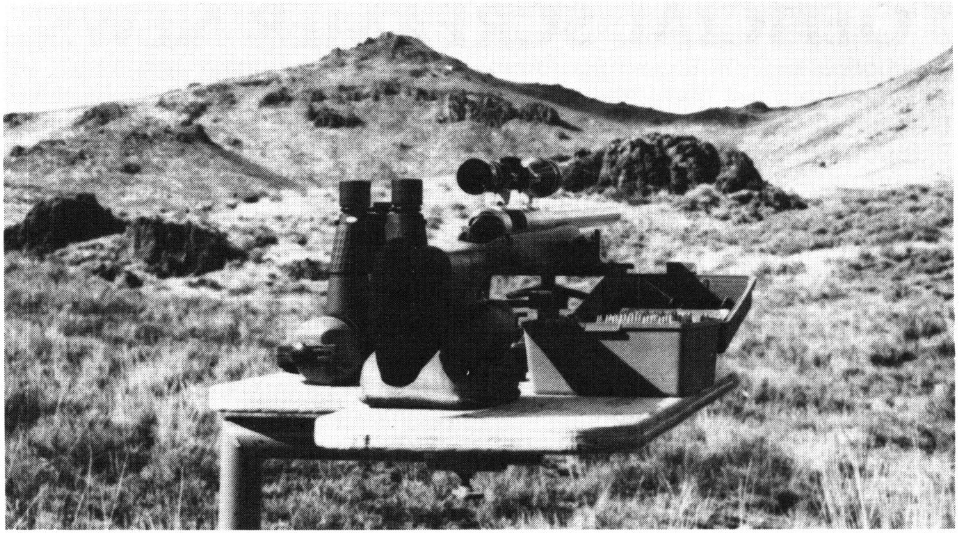
chucks at 810 and 812 yards about two minutes apart using the Port-a-Rest. It makes a nice steady platform, big enough to put a regular frontrest and sandbag on, and scatter all the necessities around. You will note from the accompanying photographs, that it has room for a casegard 100 and binoculars alongside the rifle and rest. Jake is offering an optional mount for a standard spotting scope, binocular or camera on the bench front to eliminate the tripod.

Unless you can figure out a way to haul a 1-ton concrete bench along out in the field, this is the best rest available. It also comes in handy for folks that do not have access to a good range. Mine is a varmint shooter's answer to American Express, "don't leave home without it".

There are about 30 out in the field working now, and Jake says he has yet to hear from anyone not pleased wlth the way it works. The unit is still priced at $119.95 plus UPS at this time.

It is getting to be that time of year again, and this might make a very palatable option to the usual parade of neckties, underwear and aftershave. JRW, 2425 Taffy Court, Nampa, Idaho 83687.



A closeup view of the top and the standard chuck-shooting gear.

Me at the bench. At 6′3″ and 245 I take up a lot of room. The bench was designed around people my size.

EDITORIAL

Continued

have the final standing of the Precision Shooting sponsored "Benchrest Shooter of the Year" for 1991. We intend to continue, in 1992, our sponsorship of the Benchrest Shooter of the Year award, as well as our co-sponsorship of the Official Screamer patches (the 1991 supply of Screamer patches was exhausted in mid-October. In previous years our supply of 100 patches was always more than enough. For 1992 we will increase our order to 125 patches). We will continue our support for the Super Shoot, and we look forward to doing the same for the first Wap-Wal Open for the hunter and score shooters during the first week of May.

Keen students of our modest publication will note that the page count has been increased to 76 pages with this issue. Plans are to go to 80 pages in the March-April 1992 vicinity. Yes, we DO want to make a profit at PS (a failing that we share with most businessmen . . . at least the ones that are still in business) . . . but we also believe that we should put a goodly amount of those profits back into the improvement and expansion of our product.

Here at PS . . . our staff, columnists, and the janitor . . . all wish you and yours a happy holiday season . . . and may 1992 be good to you and yours.

The Editor

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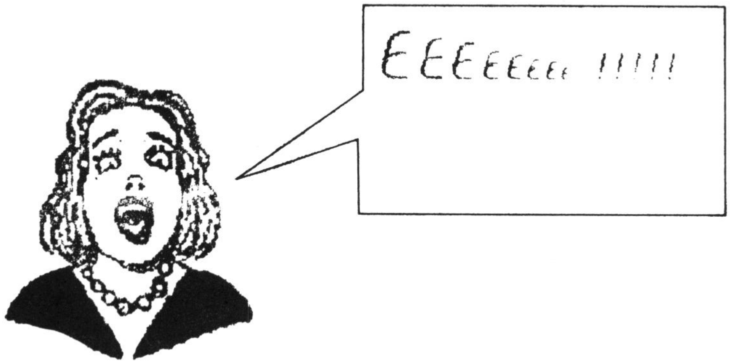
OFFICIAL SCREAMER NEWS



In mid October, to our considerable surprise, we exhausted our 100 patch supply of Official Screamer patches. In previous years we always had 20-30 patches left over at the end of the year, and we had no real inkling that 1991 was going to be any different. We express our regrets to those who did not get their application in in time to receive a 1991 screamer patch. With the concurrence of the IBS and NBRSA, who are the co-sponsors of the Official Screamer patch program, along with PS magazine, we will increase our patch order to 125 for 1992.

This is the second updating of 1991 Screamer groups; the first report was in the September issue. We plan one more report on the matter, as we do not wish this one to be too long (space is expected to be tight in this issue).

The earlier months of the year were covered in the September issue report. However four more screamers have been reported since to us, for the months of March through May, so we will start off with those four . . .

SKIP OTTO, on the day before St. Patrick's Day, turned in an .090 100 yard sporter class group at the Visalia, California range. Equipment was conventional, except we note that he used a Lilja 1-15 twist barrel . . . an unusual twist selection.

DON NIELSON, at Visalia on April 20th, shot a 100 yard ten shot unlimited group that measured .121.

KEITH MELTON, at the Buccaneer range (Wilmington, North Carolina) shot a 100 yard ten shot unlimited group that the scorer pegged at a .143 dimension.

BILL CAMPBELL, at the Sherwood, Oregon range, on May 12th, shot an .070 100 yard group in the heavy varmint class. With a .22 Waldog yet.

On to the month of JUNE. Beloved by the poets, particularly William Wordsworth, whose poem on the subject begins . . . "What is so rare as a day in June? Then, if ever, come perfect days." Touching words, surely. Some time when you are shooting at a June benchrest match . . . and the wind is howling . . . so badly that your aiming point is right off the target paper . . . and the rain is coming down in sheets . . . driving right into your face (naturally) . . . and the guy on the next bench has just DNQed . . . try reciting William Wordsworth's poem to him . . . to cheer him up. Do let us know what he tells you about William Wordsworth.

PAUL DEWALT, at the Williamsport range on June 2nd, shot a most impressive 5.250 inch group of ten shots at 1,000 yards. Paul shot a .308 Baer, with Sierra 220 grain bullets in front of four or five pounds of RL22 powder.

JOHN SOBOLEWSKI, at the June match for unlimited class rifles at Reed's Run, was a busy little fellow indeed. He started out with a 10 shot group at 100 yards that measured .142. At 200 yards he added two more screamers; a .366 and a .375. Three screamer groups **in the same class,** on a given weekend . . . is a rather unusual accomplishment.

CHARLIE GOUGH, at that same Reed's Run match, shot a 200 yard 10 shot unlimited class group that they paced off at .359.

JOHN SONDERLAND, of Seattle, Washington, at the Tacoma range on June 29th turned in a 100 yard target that measured .094, in the light varmint class.

ED WATSON, on June 23rd, at the Rockingham Gun Club (Reidsville, North Carolina) just snuck in under the fence with an .099 group in the light varmint class.

FAYE BOYER shot a 300 yard group that measured .352 in the heavy varmint class at Weikert, Pa. on June 9th.

TIM CANTWELL, at St. Charles, Missouri on June 16th, shot a 10 shot unlimited class group that measured .354, at the 200 yard distance.

GIL HUDSON, at the Visalia, California range on June 15th, shot a 100 yard light varmint class group of .096.

DON CREACH, at the St. Louis range on June 8th, turned up a .075 sporter class group at 100 yards.

BILL FORRESTER, also at St. Louis on June 9th, turned in two 200 yard screamers. One in the sporter class of .186, one in the heavy varmint class of .197. The heavy varmint group was fired with a ".22 USA", and 24.0 grains of 4198. We confess our ignorance of further details.

RICHARD GRIFFIN, also at St. Louis on June 8th fired a 200 yard heavy varmint target of .193 dimensions.

On to the month of JULY. The match season is now in full swing, and it is a good time to get out there and show the world what you're made of. If that, on second thought, worries you . . . perhaps we can sit by the backyard pool and ponder The True Meaning of Things over another Beefeater gin and tonic.

KERMIT ZIMMERMAN, at the Minnetonka range (St. Francis, Minnesota), in the heavy varmint class on July 21st, at 100 yards, shot an .084 group in the third match, and followed that with a real screamer, an .046 in the fifth match. That's a real small group, on a real tough range to shoot.

JIM PATTEN shot an .095 scramer at 100 yards in the heavy varmint class at Helena, Montana on July 6th. Most people do not shoot screamer groups at Helena, Montana. Most people can't find Helena, Montana.

FAYE BOYER, on July 21st shot a 300 yard heavy varmint class group that measured .339 at Charlotte, North Carolina. On the following weekend she fired a 10 shot unlimited class group of .145 at Fairchance, Pa. Don't ask us what she does mid-week.

SMILEY HENSLEY, at Bristol, Virginia (the Kettlefoot club), on July 7th, shot an .082 screamer group in the heavy varmint class. Don't ask us why Faye Boyer did not shoot a screamer group that weekend. Maybe she was ill.

RUSS HAYDON, a PS advertiser (a paid commercial, this) shot an .087 group in the light varmint class at the Tacoma range.

ED WATSON, at the Kettlefoot Club (Bristol, Tennessee) on July 6th, shot a .174 200 yard group in the sporter class.

JERRY SCHAEFER, also at that Kettlefoot match, fired a .160 200 yard target of .160 dimensions.

KEN RHYNE, also at Kettlefoot, turned in a 200 yard target in the heavy varmint class that was measured at .172.

ED WHITE, also at Kettlefoot (there must have been a few real calms there that weekend) thought he would be a little different, and do the deed at 100 yards. He turned up a real tiny .059 group in the heavy varmint class.

BILL GAMMON, of Canadian Mountie fame, produced a 200 yard target of .138 dimensions at Holton, Michigan on July 13th. He probably would have done better yet if he had been at Kettlefoot the preceeding weekend.

RAYMOND CEPLINA at Holton, Michigan along with Mr. Gammon (it is considered likely that there were others there as well) on July 14th shot a 100 yard heavy varmint class .083 group.

GARY AMATRUDO, at the Dunham's Bay range on July 13th turned in an .076 100 yard group in the heavy varmint class.

MARTY CARATSOLE, at the Dunham's Bay matches, takes a lot of harrassment from Charlie Fountaine. Marty shot a .188 200 yard light varmint target on July 14th . . . and demanded a little respect (which of course he didn't get).

On to AUGUST. A hot, muggy, humid month. A good month to go to either Nationals, and shoot up a storm. I mean, blow everybody's doors off. On the other hand, see our earlier comments about Beefeater gin and tonics poolside. You can make a case for either school of thought. People who elect the poolside option do not get many Screamer patches however. Sometimes they get sunburn and hangovers. No theory is perfect, it seems.

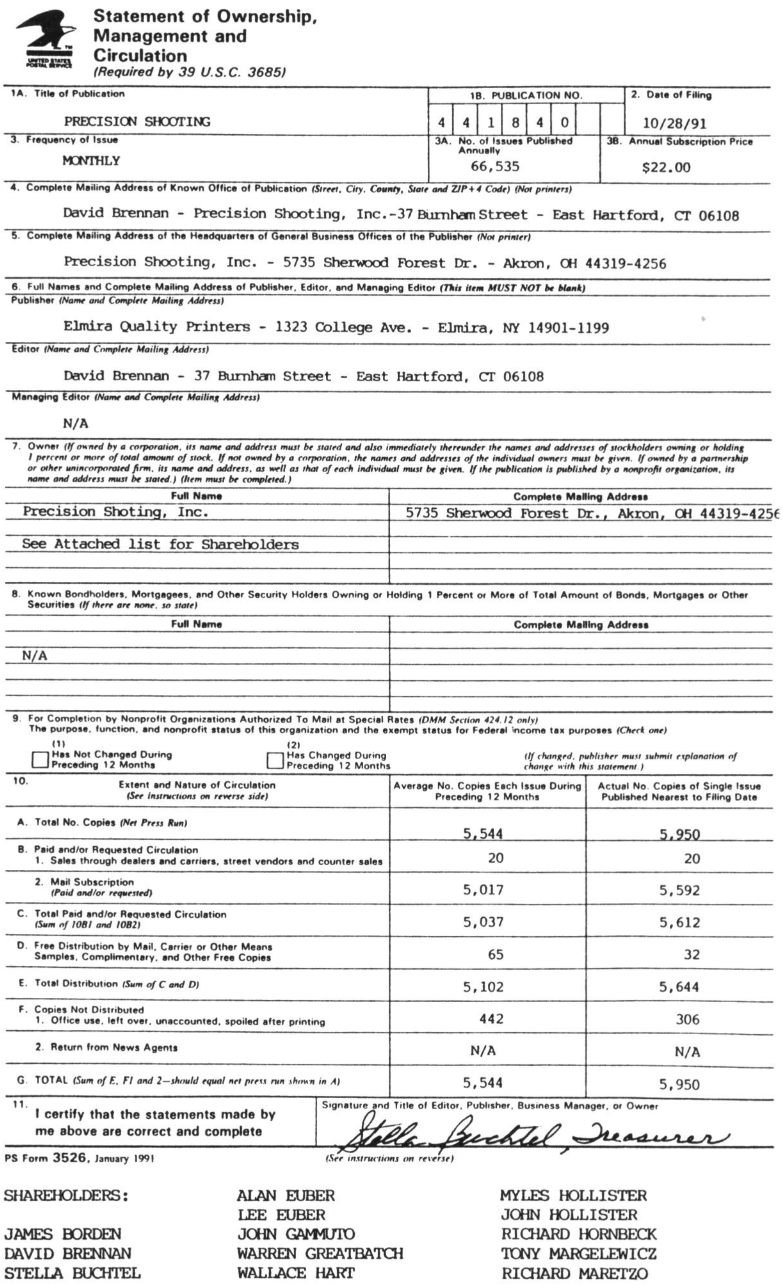
Let's start off with the NBRSA Nationals, held at Midland, Texas, because the NBRSA wished to stimulate the moribund Texas economy. If that was really their concern . . . did they give any consideration to the Connecticut economy? How about Rhode Island? Well, so much for economics, on to the shooters. BILL BRAWAND fired a ten shot unlimited class group of .351, using his trusty .25 BMS cartridge. LOWELL FREI shot a .170 200 yard group in the heavy varmint class, using the PAS action that he won at the Super Shoot. Didn't take him long to build that rifle! DON GENTNER, on his way to winning the unlimited class 100 yard crown, fired two screamers; a .124 and a .132. SMILEY HENSLEY turned in a .140 200 yard group in the heavy varmint class.

On to the IBS Nationals, held at Kelbly's Range. TONY MARGELEWICZ shot an .090 group at 100 yards in the heavy varmint class, using a .220 Russian Improved cartridge. HOWIE LEVY turned in a .254 10 shot heavy bench class screamer at 200 yards. DON NIELSON shot a 10 shot heavy bench class group that measured .132. DON GENTNER fired a 200 yard .345 group in the 10 shot heavy bench class.

At Fairchance, PA, for the NBRSA Eastern Regionals we had three screamers reported. TONY BOYER produced a .357 200 yard unlimited class group. In the unlimited class CHARLIE GOUGH turned in a screamer at each yardage . . . a .144 at 100 yards, and a .308 at 200 yards.

JOE MENDHAM, upholding Canadian national honor, shot an .091 group at Tacoma, Washington on August 31st in the sporter class, with a 6BR.

(to be continued)



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THE WRITTEN WORD

CHUCK CORNETT, who occasionally pops up in the pages of PS magazine has published his newest edition of "Prairie Dog Hunters Guide - Montana". His first edition was 63 pages, but the new, updated version is up to 80 pages now. Chuck tells me that he is seriously thinking of making this an "annual". Chuck sent us a copy, and we enjoyed it thoroughly. Available for $17.00 from Chuck Cornett, P.O. Box 9711, Fresno, California 93793-9711.

THE SINGLE SHOT EXPERIENCE is, by the publisher's description, "the buy-sell-trade paper for antique and classic firearms and accessories". To give you a better handle on what they do, and do not, deal in, the publisher further advises . . .

" 'Antique and Classic' is defined as follows: Any sporting or target firearm designed or manufactured before 1920 to include: U.S. martial weapons through the Krag. All muzzleloading rifles, pistols and shotguns, original or reproduction. All American or European single shot target or Schuetzen rifles, original or reproduction. All collectable Colt revolvers, repeating rifles, such as Winchesters, Marlins, etc. All non-current production classic shotguns such as the Parkers, Ithacas, Foxes, L.C. Smiths, etc. Any accessory item that relates to this definition is welcome.

"EXCLUDED from this publication are: modern military surplus weapons, machine guns, assault rifles, weapons and gadgets designed for police use, modern sporting weapons, unless they are reproductions of/or styled after any of the 'Antique and Classics'."

Such a limitation does a lot to keep out the riff-raff of the firearms world, and assures that the cognoscente (and any PS reader is automatically a cognoscente) will get interesting reading. The publication, now 20 pages, and growing, as the name implies, leans heavily toward single shot rifles coverage, but not exclusively so. Subscription costs are $24.00 a year. Order from The Single Shot Exchange, 711 Ormand Road, York, South Carolina 29745.

THE MUZZLE-LOADING CAP LOCK RIFLE, Ned Robert's classic work has been republished by Wolfe Publishing Company. The work covers a fascinating study of the muzzle loading cap lock rifle, from rifles on the frontier to target and hunting rifles, including the famous Hawken. There is heavy emphasis on target rifles, and their gunsmith creators. If you're really into rifle accuracy, this is one of a dozen or so "must have" books for your library. The book is hardcover, 216 pages. Retail cost is $30.00, plus $3.00 shipping and handling (domestic) from Wolfe Publishing Company, 6471 Airpark Drive, Prescott, Arizona 86301.

SINCLAIR INTERNATIONAL always has a great catalog, and their just released 38 page catalog #91-2 is a real dandy. Simply put, you have to have this well illustrated, well written booklet. And if you write for the catalog before the end of the year, and mention that you learned of it through mention in Precision Shooting magazine, Mr. Sinclair (fine fellow that he is) will send you one FREE. Write Sinclair International, Inc., 718 Broadway, New Haven, Indiana 46774. Phone (219) 493-1858.

Occasional PS contributor JOE RYCHETNIK has just published his 500 plus page book BUSH COP, a true adventure of the early days of statehood when 66 "American Mounties" were responsible for bringing law, order, and basic government to the bush regions of Alaska. Assigned to Nome Post after a brief training period in the Anchorage Detachment, the author, a former newspaperman, discovered *he* was the Post and energetically took on the job of covering this wilderness.

Using his unlimited supply of humor and knowing that native village crime ran from drunkenness to murder with few stops in between, Joe managed to carry out his "bush" assignment. Forced to use the axiom of the Texas Rangers — "One Riot, One Ranger" — for lack of adequate manpower and budget, Alaska's Bush Cops ran for years on their own. Some went unreported for weeks on end.

This history of the early days, centered in the gold rush town of Nome, brings all the agony of being first Trooper to crash his plane and be stranded on the Bering Sea ice for four days, to being the last Trooper to use a dog sled on patrol. The author's story is typical of the dozen or so Bush Cops that showed the flag and wore the badge alone in the early years. It is a tribute to all those men who served then and who now serve Alaska's public safety needs.

BUSH COP is the story of one patrolman who covered much of the Second Judicial District alone — from Barrow on the Arctic Ocean to Hooper Bay, south of the mouth of the Yukon River. All the coastal villages and the islands of the Bering Sea. A beat equal to covering the West Coast of the South 48 from the Canadian Line to Mexico. Not the largest lone beat (the Aleutian Island beat from Kodiak patrolled more miles) but a constant challenge to survive ...

We've got our hands on a copy of the book, and thoroughly enjoyed it. Available from The Boxwood Press, 183 Ocean View Blvd., Pacific Grove, CA. 93950, at a price of $24.95 plus $1.25 postage.

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Hasecuster Unlimited Class Rail Gun - Schneider Barrel, 6mm Talldog chambering, low milage, machined aluminum base, top, and barrel block, Kelbly Rings, Remington Action and trigger. Excellent shooter, great for competition and testing, has won many plaques. $1700 plus shipping. John (312) 269-8701 days, (708) 323-9029 eves.

Wanted: laminated stock for XP-100. Call (701) 772-9254, afternoons.

Wanted: TC barrels, 10″ bull, 14″ bull, .256 Win Mag, .357 Mag, .38 Super, .45 ACP, .32/20, .25/35, .35 Rem, .45/70,. Whatever you have. For Sale: for $1.00, 9″x10″x6″ box of .223 blank cases. Hate to throw them away, will pay shipping to 15-20 lbs. Phil - (203) 435-9341.

Burris Scopes below Dealers, Send $1.00, catalog & prices. Bill Dalley, PO Box 8, Evans, CO 80620. (303) 356-0015.

New .220 Russian Cases. Call with Best offer (303) 979-4555.

New PPC Cruiser Rifle, Masker built, Wichita Action, RH bolt and port, Jewell Trigger, Hart 1.25″ bbl, McMillan graphite stock, Kelbly Rings, fired once. $1100. Call Mike, Days (607) 254-8847.

Sportsman 78 w/ BDL floor plate, standard .308 chamber, 2.5 trigger pull, McMillan Silhouette Stock, featherweight taper, integrated muzzle break, master finish bluing by Robar, Bushnell Banner High ZE mounts, weight: 6# 4 oz., smithed by Fritz, never fired, one of a kind, beautiful rifle. $1500, contact Ron (717) 366-8886.

Wanted: Swindlehurst Action or rifle. Call or write Pat Cameron, (519) 848 3374, or PO Box 839, Arthur, Ontario, N0G 1A0.

Remington 40X, .22-250, SN 350XXB, 26″ stainless replacement bbl, wooden oil finished stock, Excellent, $675. Leupold 6.5 x 20 AO target Scope, rings, ANIB, $275. Together $900. (212) 874-4698.

Trade 50 Sako .220 Russian cases for XP-100 Action, Frank (714) 552- 4893.

Glenn Newick's "The Ultimate in Rifle Accuracy," is now available in soft bound. Special $10.50, plus $1.50 shipping. Russ Haydon's Shooters Supply, (206) 472-5507.

NSK 1″ Micrometer with Digital Readout. These are quality tools. Retail - $87.00, our price $67.50 plus shipping, limited supply, Russ Haydon's Shooter's Supply (206) 472-5507.

Ruger #1, .22-250, 12x Leupold Scope, very accurate piece - half minute of angle, as new, $550. (509) 422-1218.

Leupold/Siebert 30x, fch, $295. Leupold br 24x, fch, latest model w/ locking ao & mc4, $275. B&L 6-24 Target/Varmint Scope, as new, $250. D.C. Green finish reamer, 6PPC/.262 nk., like new, $65. Several 20″ SP barrels, top brands, 6PPC/.262 nk., 600-900 rounds, threaded for Hall or Stolle, $50 ea. 50 Norma cases formed & turned .30 SGH, $25. Wanted: Bonanza Benchrest seater only, .22 PPC or 6PPC. Lee (406) 442-5560 days, (406) 442-9813 eves.

Heavy Varmint 6PPC/.262 nk., Stolle Panda Action, right bolt, right port, Shilen four groove barrel, McMillan stock, 2 oz. trigger. Call (915) 643-3026.

Two 6X Leupold/Premier Hunter Class Scopes, 1/6 clicks, 3/8 dots, $250 each. New standard HV taper Hart bbl, 14 twist, $200. 1000 6mm HLS loaded rounds, Wilson Loading dies and Redding FL die, $120. (301) 875-0065.

8 new Bruno-style, SS, telescoping wind flag stands w/ daisy wheel & balsa tail, $50 each plus shipping. Looking for a Hall "M" RH bolt with either PPC or BR face. Stolle Panda, RH bolt, 6PPC, Hart bbl., Hall stock, emron paint, Shilen Trigger, $1100. (216) 777-9574.

Wanted: used benchrest, 40x, and varmint hunting rifles & related equipment. All types and calibers. Top dollar paid. Bob White, 8 New Jersey Ave., Lake Hopatcong, NJ 07849. (210) 663-5159.

Members Wanted: International Benchrest Shooters, contact Joan Borden, RD 1, Box 244 A, Tunkhannock, PA 18657. Membership and 1 year subscription to Precision Shooting only $30 in the continental U.S. See application in this issue. A fine holiday gift for a friend!

1) Trophy Stainless Actioned 6PPC Heavy Varmint, 2 Hart barrels, Shilen trigger, McMillan Graphite stock, excellent throughout $1345. 2) 10½ lb. 6PPC, Sleeved XP-100, Shilen Stainless bbl., McMillan fiberglass stock, built by Sinclair, excellent condition and accuracy $895. 3) Heavy Varmint screw-in 6PPC, sleeved and accurized 700 Rem action, McMillan fiberglass stock, Hart bbl, Hart 2 oz. trigger, built by Hart, near excellent $825. 4) Light Varmint 6PPC built by Masker, CPS Aluminum action w/coned bolt and left port, Hart bbl. fired 200 rounds, McMillan graphite stock, Jewell trigger, excellent condition $1375. 5) 6PPC 3 class rifle, Stolle Panda action, McMillan fiberglass stock w/weight system, Lilja stainless bbl., Hart 2 oz. trigger, gunsmith Sinclair, very accurate and attractive $1395. 6) Rem 40X BR, 20″ near new factory bbl., pillar glassbedded, 2 oz. trigger, beautiful stock finish, excellent $775. 7) Long range varminter 25-06, Sleeved 40X action, H&S fiberthane stock, Rem stainless bbl. - 300 rounds, as new $850. 8) Complete set 22 cal Pindell steel bullet swage dies, RCBS Rockchucker press modified by Pindell, ejector frame, core cutter, all items to make bullets except jackets and lead wire. Only 2000 bullets made $595. Bob White, 8 New Jersey Ave., Lake Hopatcong, NJ 07849. (201) 663-5159. SASE for 10 page list of guns/equipment.

BOLT HOLSTERS - heavy duty, handmade, treated leather with flap and snap. Plenty of room for large bolts. $14.99 each plus postage. **WIND FLAG STANDS** - extends to 9 ft. Commercially made aluminum stands with a clear anodized finish. Has folding tripod legs and positive stop locks on each section. Top section is 3/8″dia. $33.50 ea. with 10% discount on lots of 5 or more stands. Shipping costs not included. R.F. Mitchell, 430 Walnut St., Westernport, MD 21562. (301) 359-0638.

Unertl 2″ 36X scope, fine x-hairs by Premier, + 1/3 increasing eyepiece, excellent condition, $325. **Unertl** BV20, fine x-hairs, dot, $250. **Longo** Benchrest Powder Measure, $80. **Anschutz** Model 64 Silhouette, 22RF rifle, $375. **Ruger** Single Six Revolver, .22LR & 22WMR cylinders, $125. John Gammuto (708) 323-9029 Eves, (312) 269-8701 Days.

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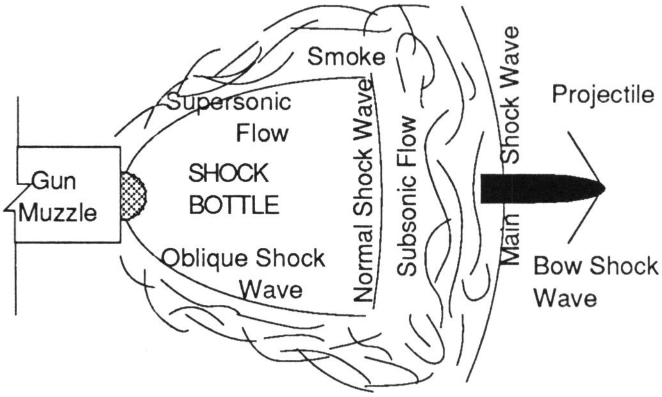
October 15, 1991

Mr. Bob Jourdan
385 Fenway Place
Bartlesville, OK 74006

Dear Sir,

In your article: "Recoil and Shooting", Precision Shooting Magazine, July 1991, Vol. 37-#3, we were surprised that no reference was made to muzzle brakes as a corrective means for recoil attenuation. In our opinion, we have found that using a muzzle brake is a viable means for achieving this purpose. This is achieved in two ways: 1) Psychologically; felt recoil is reduced, thereby increasing shooter comfort. A shooter is less likely to "flinch" with a muzzle brake attached, hence he will maintain a better hold for each shot. 2) Mechanically; the bullet will undergo less reverse flow with a muzzle brake. Reverse flow is that period in which upon bullet exit from the muzzle, the hot propellant gases over take the bullet. Since the propellant gases flow pass the bullet, the bullet "thinks" it is actually flying backwards; this is called *reverse flow*. During this period, the bullet wants to re-orient itself with respect to the propellant gases. This condition contributes to the initial yawing of the bullet, which in turn affects the accuracy of the system. By employing a properly designed muzzle brake, most of the gases are directed away from the bullet, resulting in a minimum period of reverse flow which aids in improving the accuracy of the system.

The concept of utilizing a muzzle brake is best illustrated by looking at the dynamics of the exiting propellant gases. The maximum volume in which the propellant gases occupy upon exit from the muzzle does not occur during reverse flow, but generally, when the projectile is approximately 15 to 20 calibers away from the muzzle of the gun (see figure 1). The supersonic region (sometimes referred to as the *shock bottle*) is of very high energy. This energy is normally dissipated to the atmosphere. By incorporating a muzzle brake this energy is utilized to do useful work on the system. In addition, the shock bottle is also reduced in size due to the particular geometry of the muzzle brake. This again reduces the time the projectile is subjected to reverse flow conditions.



Configuration of Shock Bottle

Figure 1
Copyright 1991, P&K Inc.

We have recently been developing and manufacturing closed muzzle brakes for commercial use. These muzzle brakes have been designed by our engineers for optimum performance based on careful analytical and experimental analyses of current small caliber weapon systems. Our tests, conducted with a 7mm Remington Magnum Rangemaster Rifle, have indicated a 45% reduction in total recoil energy without degrading the accuracy of the rifle.

Unlike other competitors, we have optimized internal baffles into our design. These baffles significantly enhance the efficiency of the muzzle brake. By permitting the gases to expand in a large chamber, the internal baffles are then able to redirect a large percentage of the muzzle gases, thereby causing a forward thrust on the rifle. This forward thrust counter acts the recoil force on the gun resulting in reduced total recoil. This forward thrust also reduces muzzle climb, thereby permitting quicker follow on shots. Every model has been optimized, for example, as can be seen in the chart below (see figure 2), the addition of a fourth baffle will only increase the proportional thrust on the brake by less than 7% (based on Model M3 Muzzle Brake). In addition, we tailor each muzzle exit hole for every caliber, making again for a more efficient system. Screw threads are class 2 machine threads which provides a precision fit and alignment of the muzzle brake with the bore axis of the rifle.

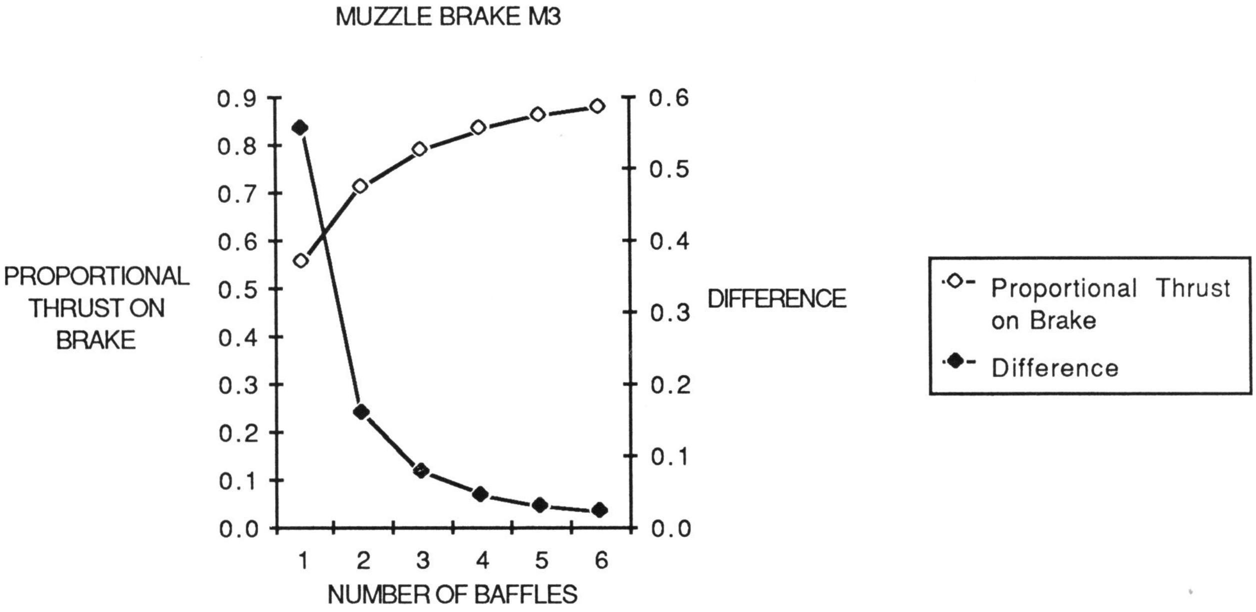


Figure 2

Copyright 1991, P&K Inc.

To our knowledge muzzle brakes are not generally used for big bore competitive shooting. We are unaware if the rules prohibit their use, or if competitors are unaware of their benefits. We tend to believe the former is the reason why competitor shooters don't take advantage of them. Maybe you could clarify this issue for us. Anyhow, we are supplying you with a free sample for your own evaluation. This muzzle brake is designed for caliber .30 rifles only, and is machined from solid bar stock of high quality steel. We also manufacture the same model in stainless steel and other models for sporting rifles (see brochure). We recommend this particular muzzle brake for heavy barrel competitive sporting rifles like the Remington Rangemaster Rifle in caliber .300 Winchester Magnum, .30-06 Springfield, or .308 Winchester. Instructions are also provided for proper installation. This model normally retails for $95.00 and is designed specifically for match grade rifles. If you have any questions concerning this muzzle brake, or any of our other products, feel free to give us a call.

Sincerely,

John Olexa

John Olexa
President

pw

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Editor, Precision Shooting Magazine, Mr. David Brennan, 37 Burnham Street, East Hartford CT 06108

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BR-50 International©

CENTERFIRE...100 yards
RIMFIRE.......50 yards
AIR RIFLE.....25 yards

OCTOBER 1991

BR-50 CLUB OF SOUTHERN CALIFORNIA (Rimfire/Airgun OPEN) 10/5/91 SOUTH BAY ROD & GUN CLUB--DULZURA, CALIFORNIA

TOP-TEN

NAME	DIV/RIFLE	SCOPE	AMMUNITION	RAW	HANDICAP	AGGREGATE	POINTS /UPDATE
1. JIM BELL	R/Remington 40X*	36 LeuPrem	Lapua Master	4235	+2.0000%	4319.7000	20/ 92
2. LARRY BROWN	APC/SportsMatch GC2*	15 Weaver	Crosman Premier	3675	+5.0000%	3858.7500	18/ 84
3. LEE MARKEE	A10/Feinwerkbau C60	4-12 Bushnell	RWS 530 Extra	3520	+2.7500%	3616.8000	16/ 26
4. PETE CORNELL	R/Winchester 52B*	36 Leupold	Lapua Master	3535	+1.6875%	3594.6531	14/ 67
5. STAN HILL	R/Remington 40X*	36 B & L	Lapua Master	3400	+2.5000%	3485.0000	12/ 88
6. RON BOORD	R/Winchester 52C*	36 LeuPrem	Lapua Master	3310	+1.8750%	3372.0625	10/ 17
7. ROBERT DEMENT	A10/Steyr CO2	18 LeuPrem	Lapua Rifle Champ.	3280	+2.2500%	3353.8000	8/ 57
8. DAVE MARKEE	R/Anschutz 64MS	6-24 B & L	Lapua Master	3260	+2.5000%	3341.5000	6/ 56
9. HOWARD PRAY	A10/Feinwerkbau 600	24 Simmons	RWS 530 Extra	2965	+3.8750%	3079.8937	4/ 27
10.MARGARET HOEY	R/Winchester 52B*	36 Leupold	Lapua Master	2920	+0.7500%	2941.9000	2/ 6

*Modified by TARGETECH

Talk about pickin' up all the marbles! JIM BELL shoots his highest match-agg ever, and in the process claims the SOUTHERN CALIFORNIA BR-50 RIMFIRE CHAMPIONSHIP, AND TOP-GUN, AND SETS A NEW RANGE RECORD!

But let me tell you how this really came down to the wire. (All we need here is the theme from ROCKY in the background.) Last year JIM BELL was competing in Centerfire division. Toward the end of the season he was getting rather tired of all the "get-ready" and all the stuff to haul to the range. (Years ago his right leg had to be amputated at the hip & he walks with the use of those "wrist-crutches") So he sold his rifle and loading gear, and had Targetech build up a Rimfire 40X. I did our typical conversion; shorten & target-crown the barrel, Shilen 2oz trigger, Davidson dovetail bases, 1-piece SportsMatch scope mount, (this one WON'T bend) and glued the BARREL into a McMillan HV stock. That's right, in this system the barrel anchors the action instead of the action anchoring the barrel. Emblazoned along the left forend in silver script against the red-white-&-blue finish; the name "LIBERTY BELL". With his left-over 36 B&L he began this year's chase for the Southern California BR-50 RIMFIRE Championship. That title was waiting for whoever accumulated the most Champoints over the ten-match season. Those Champoints are awarded based upon where a shooter finishes in the top-ten of each match. He had his work cut out for him. His number-one opponent would be STAN HILL, the 1990 Rimfire BR-50 Champion, as well as several others who have won matches in the past. All are well past their "rookie year". Plus he had to un-learn some habits and adjust to the sophisticated techniques of rimfire.

The first match began well. (San Diego Coumty Fish & Game) Dave Markee won it, but Jim came in 2nd in rimfire (3rd overall) and Stan finished right behind him. So he had a one-point lead over Stan and was only two back of the leader. In match #2, he shot his way into the 4000 club with a 4070, but Stan finished two positions ahead of him, matching his lead, and raising him one point. In the 3rd match (San Gabriel Valley Gun Club) Jimmy began to realize why Stan was the Champ, as Stan won first-place overall, and Jim came in 5th. He continued to shoot well though, and in match #4 took 2nd overall, but THE CHAMP took first and lengthened his lead to six. Match #5 (May) was held on the west-range at San Gabriel, (not real user-friendly) and Jim finished 4th. But Stan was 3rd, and with only five matches left, Jimmy was seven points back. This meant that he had to gain eight positions in five matches to win. It didn't look good.
(What to do, what to do?)

Jim knew that the second half of our Championship Series was going to be shot at our new home-range, South Bay Rod & Gun, at Dulzura, in the mountains east of San Diego. The range is known for it's blustery winds. To win this thing, he'd have to become a WIND-WIZARD! I suggested we have Dick Thomas (Premier Reticles) build him a special scope using what we have come to call the "BR-50 Reticle". It has a dot the size of a .22 bullet-hole at fifty yards, situated in the upper third of the sight-picture, & rolled 90 degrees so the knobs are on the left for easier access. At 36X, your far flag is still visible in the bottom of the scope. "Get the silver one", he said.

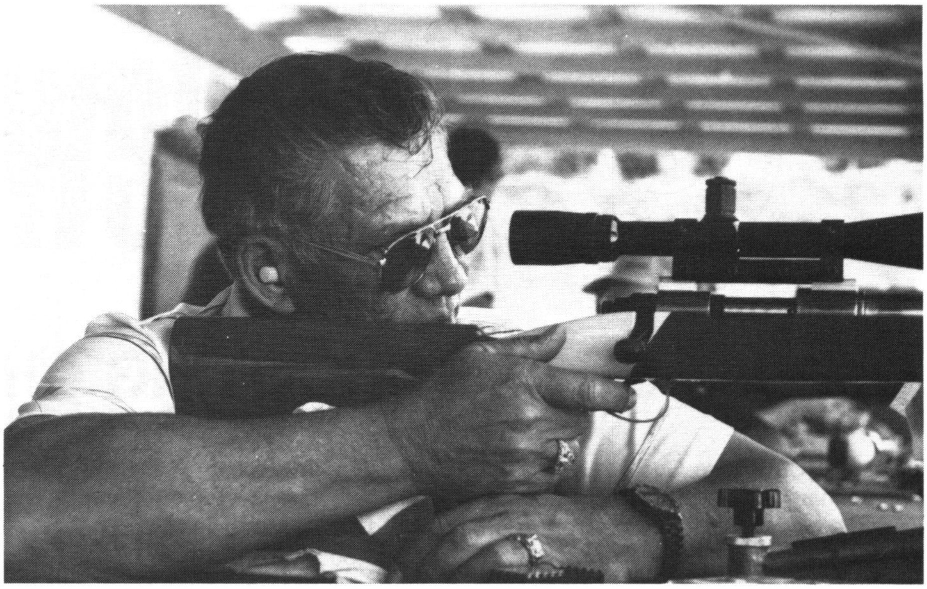
June 1, 1991 found the BR-50 Club of Southern California lined up on twenty-four brand new benches on a gorgeous fifty-yard range, (although the last 2 miles of road into this place can be a bit ..adventurous) overlooking a forest of windflags. When the smoke cleared, Jim was first in rimfire and Stan was second. He gained ONE point in the standings; not good enough. Now with four matches remaining, he was still six back. One-position-at-a-time wasn't gonna get there. July 6, match #7: STAN BLINKED! Jim finished 2nd overall--Stan 5th! A gain of three. Oh Yeah, now we're cookin'! (Stan-58/Jim 55) Only three back, & three matches to go. You see, now nobody but Jim himself had to beat Stan. THE CATBIRD SEAT!

Match 8--August; Jim 2nd overall-Stan 3rd. (Jim-64/Stan-66) Two to go! Do you remember, in "The Hustler" where Minnesota Fats shows Fast Eddy that CLASS is the winning-edge? Well,.. September--Match #9: STAN HILL-First-Place, Jim Bell-third. WHOOPS! Four points back & one match to go. Fortunately the last match of a BR-50 Championship Series is always worth DOUBLE CHAMPOINTS, meaning Jim must win by only two positions to TIE; three to WIN. But where will you find two other guys capable of beating the CHAMP, (and not Jim)?

TO BE CONTINUED: (Just kidding,.Jeez! See match report above.)

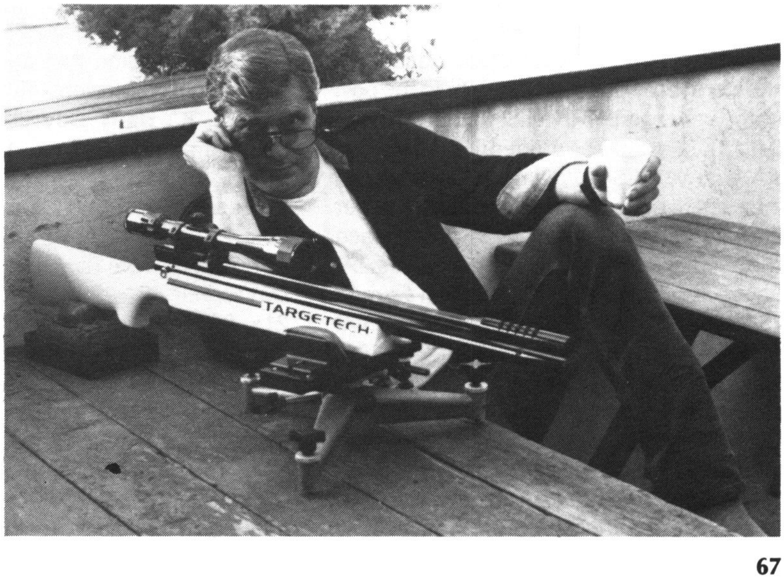
--Larry Brown

JIM BELL: '91 SO-CAL BR-50 (Rimfire) Champion. Remington 40X* (*modified by Targetech) 36 LeuPrem, Lapua Master ammo. Took TOP-GUN with 92 Champoints! "Never, never, NEVER ...... give up"!



HOWARD PRAY: SO-CAL BR-50 (A10) Champ, (Olympic air rifle) displaying the winning trigger-finger. "I think I'll have it bronzed." Feinwerkbau 600, 24 Simmons, RWS 530 ammo.

LARRY BROWN: '91 SO-CAL BR-50 (APC) Champ. SportsMatch GC2* (PreCharged pneumatic air-rifle) 15 Weaver, Bisley Magnum/Crosman Premier ammo. (*modified by Targetech) "When do we eat?"



IBS News

Edited by Dave Brennan

1991 SCORE SHOOTING CHAMPIONSHIPS

Dunham's Bay, Lake George, New York. The Dunham's Bay club hosted a successful score shooting championship on September 14th and 15th. There were 25 shooters in the hunter class, 17 shooters in varmint-hunter class, and 45 shooters in varmint for score.

Hunter class. ERWIN SHINKLE and DAN CARUSO locked horns for two days, with Erwin winning the 100 yard stage, Dan taking the 200 yard stage, and Erwin finally prevailing by a single point in the grand aggregate. The top four shooters in the grand agg all fired 30 caliber . . . a bit of a mixed bag (the cartridges, not the shooters), with the respective placings going to: 1.) 30 SFG, 2.) .308 Win, 3.) 30 Viper, 4.) 30 TH. There's a message here somewhere, and if we ever figure it out . . . you'll be the first to know. At 100 yards: 1.) Erwin Shinkle 249-13x, 2.) Bill Niemi 249-8x, 3.) Gary Long 248-13x, 4.) Randy Fritz 248-12x, 5.) James Lyon 248-10x. At 200 yards: 1.) Dan Caruso 246-7x, 2.) Erwin Shinkle 245-1x, 3.) Alan Kogoy Sr. 241-3x, 4.) Blaine Johnson 240-1x, 5.) Bill Niemi 239-2x. Grand aggregate: 1.) Erwin Shinkle 494-14x, 2.) Dan Caruso 493-17x, 3.) Bill Niemi 488-10x, 4.) Randy Fritz 486-14x, 5.) James Lyon 486-13x, 6.) Gary Long 485-20x, 7.) Joe Gilbert 485-16x, 8.) Blaine Johnson 484-12x, 9.) Alan Kogoy Sr. 484-11x, 10.) Vince Pastorella 481-11x.

Varmint hunter class. Once again two shooters really duked it out, right to the bell. At the very end BERNARD WILLIAMS and DAN CARUSO had identical 496-16x scores, with Mr. Williams prevailing, but they had to go to the Creedmore Rule to get the winner. That made it two second place finishes for Dan Caruso. At 100 yards: 1.) Bernard Williams 250-10x, 2.) Dan Caruso 250-10x, 3.) Alan Kogoy Jr. 249-11x, 4.) Al Weaver 249-11x, 5.) Joe Gilbert 249-10x. At 200 yards: 1.) Dan Caruso 246-6x (his second win at this yardage), 2.) Bernard Williams 246-6x, 3.) Joe Gilbert 245-3x, 4.) Al Weaver 245-2x, 5.) Ken Livengood 245-1x. Grand agg: 1.) Bernard Williams 496-16x, 2.) Dan Caruso 496-16x, 3.) Al Weaver 494-13x, 4.) Joe Gilbert 494-13x, 5.) Gary McPherson 493-12x, 6.) Ken Livengood 493-12x, 7.) Michael Williams 492-17x, 8.) Alan Kogoy Jr. 492-16x, 9.) Dwight Furrow 490-14x, 10.) Gary McPherson 488-12x.

Varmint for score class. Once again a real horse-race, with three shooters turning in 499 scores. TOM PERIA prevailed over LEE EUBER and JIM OLIVER by x-count. At 100 yards it was possible to fire a "clean" 250 score . . . and still finish 23rd at the yardage! At 100 yards: 1.) Bill Gebhardt 250-21x (the high x-count for the weekend), 2.) Tom Svack 250-19x, 3.) Dan Caruso 250-19x, 4.) Jim Oliver 250-18x, 5.) Tom Peria 250-17x, 6.) James Johnston 250-17x, 7.) Brian Niemi 250-17x, 8.) Barry DeVliegher 250-17x, 9.) Bob McGuigan 250-16x, 10.) Ted Parreco 250-15x. At 200 yards (rather curious results here . . . Dan Caruso, who had won the longer yardage aggs in both previous classes, and who shot so well in this class at 100 yards . . . faded from the sight of mortal man at 200 yards. And Bill Gebhardt, a holy terror while winning the 100 yard agg, promptly joined Mr. Caruso in exile on Elba after the 200 yard stage. Fortune is indeed fickle) 1.) Lee Euber 249-8x (if we recall correctly, Lee fired in his first score match about a month previous), 2.) Geza Nagy 249-8x, 3.) Tom Peria 249-6x, 4.) Jim Oliver 249-2x, 5.) Geza Nagy 248-6x (we can only presume that Geza entered two guns), 6.) Rod Morton 248-5x, 7.) Bill Niemi 247-9x, 8.) Barry DeVliegher 247-5x, 9.) Gary Amatrudo 247-5x, 10.) Tom Svack 247-3x. Grand agg: 1.) Tom Peria 499-23x, 2.) Lee Euber 499-22x, 3.) Jim Oliver 499-20x, 4.) Geza Nagy 498-17x, 5.) Geza Nagy 497-23x, 6.) Tom Svack 497-22x, 7.) Barry DeVliegher 497-22x, 8.) Rod Morton 497-21x, 9.) Kenneth Valan 497-18x, 10.) Gary Amatrudo 497-17x, 11.) Joseph Davis 496-24x (high x-count for the grand agg), 12.) James Johnston 496-22x, 13.) Bob McGuigan 496-21x, 14.) Ted Parreco 496-21x, 15.) Bob White 496-15x, 16.) Lou Church 496-15x, 17.) Howard Bremmer 495-21x, 18.) Robert Lembo 495-13x, 19.) Bill Gebhardt 494-23x, 20.) Bob Sicina 494-17x.

— End —

Dear Dave:

Enclosed please find 10 photos of the various winners at the 1991 IBS Score Championships held at Dunahm's Bay on September 14 & 15, 1991. The photos have labels on their back-side. Pete Steffan should get the credit for taking the pictures. I trust you will print them with the match report.

I'm not sure how much detail you get from Charlie Fountaine about this year's championships so I thought I'd give you a few inputs you may find useful in putting together the report. Attendance was good; 87 guns on the line. Hunter class had 25 guns, varmint hunter 17 guns, and varmint for score 45 guns. They came from the north woods of Maine and the sandy beaches of Florida and a whole bunch of points in between. Most competitors shot only one gun (the smart people) but a significant percentage shot 2 guns (the less than wise — I know I'm one of them). A few even shot 3 guns (these folks are either totally nuts are are supermen of the sport)! Whatever, enthusiasm was high as evidenced by the formation of ten 4-man teams.

Saturday's weather was nearly perfect — at least for hikers, hunters, ADK'ers. Beautiful blue sky dotted with picture perfect clouds, a bright sun beaming rays of light across the fall green foliage of the mountains, crisp air with temperatures ranging from the 60's in the morning to the 70's in the afternoon, and just enough of a breeze to deliver the everstrengthening aroma of autumn. But, for the shooters hoping for 250-25x 100 yard scores they saw mirage come and go, winds (not breezes) switching madly as it only can at the 'Bay'. Actually it really wasn't all that bad; but then again it wasn't the kind of conditions that make for record breaking scores.

Then, came Sunday — the "Bay" at its "best". It seemed at times to be a rainforest in the Arctic being hit by a hurricane. This was weather that was difficult to appreciate by shooters and the outdoors crowd alike. Lots of rain, cool temperatures (60's), and lots of nasty wind (which at times had difficulty deciding which way to blow!).

On Saturday evening we raffled off over 30 door prizes donated by folks supplying the benchrest community. It sure would be nice to see them recognized in the "P.S." report on this match. They are as follows: Seely Masker, Remington Arms, Redding Reloading, Myles Hollister, Hart Barrels, Burris Scopes, Alvin Davidson, Bob Pease Accuracy, Wolfe Publishing, Shilen Rifles, RCBS, Lee Six, Jim Borden, Ira Farnsworth, and Tony Hidalgo.

Hope this is of some use to you. Let me know if I can be of further help.

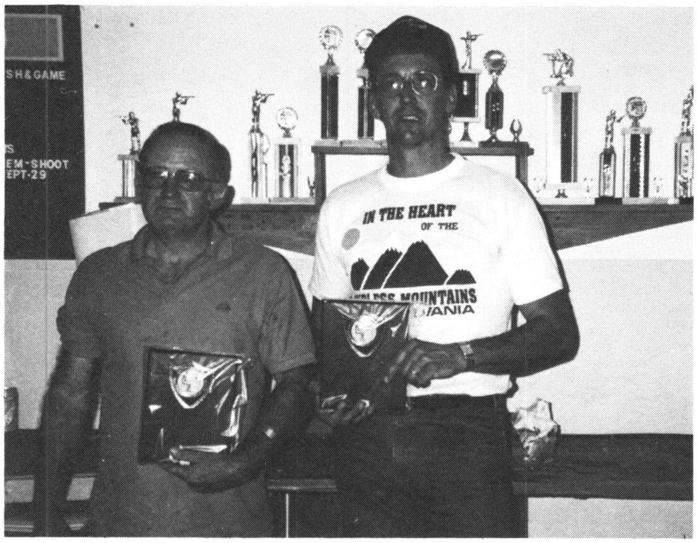
Sincerely,
Joe Golba

DAMEON CHURCH
Top Junior Shooter
(Award presented by Charlie Fountaine)

1991 SCORE CHAMPIONSHIPS

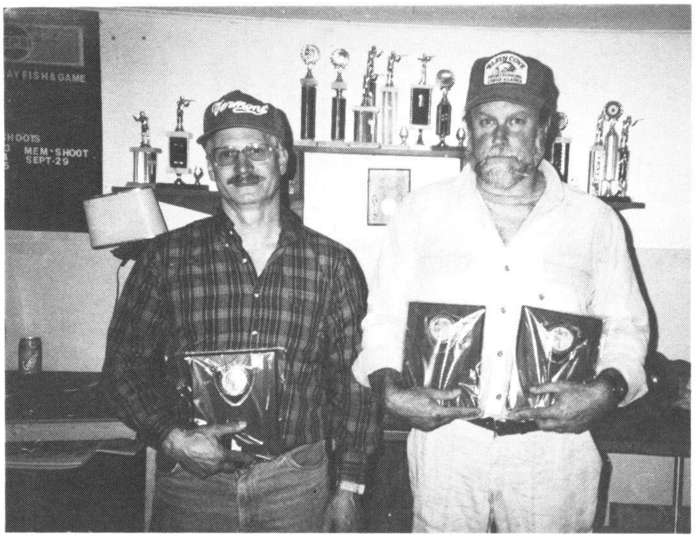
THE WINNERS

Photos by Pete Steffan, Courtesy of Joe Golba



SH&GAME
MEM-SHOOT
SEPT-29
IN THE HEART
OF THE
MOUNTAINS

100 YARD AGG WINNERS
(l) Erwin Shinkle (H), (r) Bernard Williams (VH),
(missing) Bill Gebhardt (VFS).



FISH&GAME
SHOOTS
MEM-SHOOT
SEPT-29

200 YARD AGG WINNERS
(l) Lee Euber (VFS), (r) Dan Caruso (H and VH).

International Benchrest Shooters
HUNTER CLASS

ERWIN SHINKLE
Hunter Champion (494-14x)

IN THE HEART
OF THE
MOUNT
NNSYLVA
International Benchrest Shooters

BERNARD WILLIAMS
Varmint-Hunter Champion (496-16x)

International Benchrest Shooters

TOM PERIA
Varmint for Score Champion (499-23x)

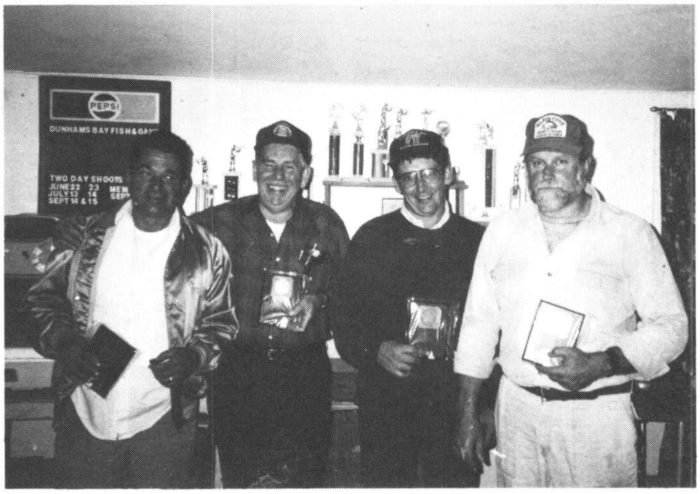
PEPSI
DUNHAMS BAY FISH & GAME

VARMINT HUNTER 4-MAN TEAM
"Mainiacs & Md." (1964-54x).
(l-r) Gary McPherson, Joe Gilbert, Blaine Johnson, Dan Caruso.

VARMINT FOR SCORE 4-MAN TEAM
"Damifino" (1985-81x).
(l-r) Rod Morton, Joe Davis, Ted Parreco
Bob White (Invisible under hat).

PEPSI
DUNHAMS BAY FISH & GAME
TWO DAY SHOOTS
IN THE HEART
OF THE

THREE GRAND AGG WINNERS
(l-r) Erwin Shinkle (H), Tom Peria (VFS), and Bernard Williams (VH).



HUNTER 4-MAN TEAM
"Mainiacs" (1938-48x).
(l-r) George Hogan, Joe Gilbert, Blaine Johnson, Dan Caruso.

INTERNATIONAL BENCHREST SHOOTERS APPLICATION

NAME ____________________

ADDRESS ____________________

CITY ____________ STATE ____________ ZIP ____________

( ) IBS Membership and Precision Shooting Magazine — $30/year

( ) Associate Membership — Must live in same household as a Regular Member — receives no magazine — $5.00/year

( ) Junior member — 17 and under — no magazine — $5.00/year

( ) Overseas Membership — Includes Precision Shooting Magazine $42.50 in US Funds for Surface Mail
$60.00 in US Funds for Air Mail

( ) Life Membership — includes Precision Shooting Magazine — $300.00 in US Funds

( ) Club Membership $30.00 for American Continents
$37.50 Overseas (US Funds only) (For Surface Mail)

MAIL MEMBERSHIPS TO: JOAN BORDEN, R.D. #1 Box 244A, Tunkhannock, Pa. 18657
Make checks payable to IBS.
Allow up to 60 days for first magazine to arrive.

MAINVILLE

A September 2nd 100 yard score match at the Mainville, Pa. range.

Varmint hunter class (9 shooters): 1.) Ken Livengood 250-9x, 2.) Al Weaver 248-8x, 3.) Ken Laubach 247-3x, 4.) Alan M. Kogoy 245-9x, 5.) Bill Creasy 245-5x.

Hunter class (6 shooters): 1.) Frank McKee 250-9x, 2.) Alan Kogoy 249-13x, 3.) Gary Long 247-13x.

Varmint for score (29 shooters): 1.) Carl Lynn 250-14x, 2.) Al Whiteash 250-14x, 3.) Bob Waechter 250-11x, 4.) Jeanne Lynn 250-11x, 5.) Bob McGuigan 249-18x, 6.) Paul Ryan 249-17x, 7.) George McCoy III 249-16x, 8.) Bill Gebhardt 249-16x, 9.) Tom Gingher 249-15x, 10.) Harold Hill 249-11x.

President's Message

I would like to start this message by wishing you and your family a very happy holiday season.

Rather than reflect on the past year I would like to begin by sharing with you, before the Annual Meeting, some of our plans for the 1992 shooting season.

1. The Rookie of the Year program will be run again this year. We hope to increase interest in this program by improving the match reporting to the coordinator and printing updates throughout the year.
2. The IBS Group Shooter of the Year will again be run. This program will also benefit from improved reporting and updates will be printed.
3. The Score Shooter of the Year programs will be carried out again as well.
4. We hope to again co-sponsor with the NBRSA and Precision Shooting magazine the Benchrest Shooter of the Year award program.
5. We have discussed with PS and NBRSA the possible expansion of the "strange duck" to include several different locations throughout the country on a given weekend. Results could then be forwarded to a central location and the "strangest duck of all" determined. Although we all know the problem with postal matches we should do this for two reasons. First, it will be fun and second, it will give more people a chance to shoot something different in competition.
6. I would like to update the rule book from its last revision in 1988.

I feel that this is a very aggressive plan and will require the help of many people. I hope to cover many of the details of these programs at the Annual Meeting. Finally I would like to remind everyone about all of the winter league shooting that is taking place in the northeast. Let's all get out our longjohns and support the people sponsoring these shoots.

Happy Holidays,
Jim Oliver

CENTRAL JERSEY WINTER LEAGUE

Dear Dave:

On October 27th the Central Jersey Rifle and Pistol Club (CJR&P) conducted its first ever IBS registered 100 yard Score Tournament. Unfortunately, since this is the first time we have tried to hold a registered Winter League Score match at CJR&P, we are doing this on a budget that does not allow sufficient funds for trophies for all three classes. Thus, the Winter League Score shoots are advertised as only Varmint for Score. If we start to see some interest from hunter and Varmint Hunter shooters at CJR&P, then next year we may open the matches up to all three classes. Even so, we did have one brave soul that competed with a Hunter rifle against eleven other Varmint for score shooters. Dan Paltukis didn't fair too badly either, finishing tenth out of twelve shooters.

The Score match was held on the Rifle Range at CJR&P using the brand new benches constructed for us benchresters by the leadership of Berty Rypkema and the good graces and money from the membership of CJR&P. These benches are steel and concrete portable benches due to the fact that high power shooters also conduct matches on this range. The new benches however weigh at least 500 lbs. and are designed for maximum rigidity and stability. It takes a special trolley to move the bench. These are vast improvements over the old portable wooden benches we have been using at CJR&P. We encourage shooters that have steered clear of CJR&P in the past because of our poor wooden benches to come out and see our new setup. We think you will be very pleased.

Conditions were mild but windy all day long. The results for the day are as shown below:

Varmint for score: 1.) Bert Rypkema 250-17x, 2.) Geza Nagy 250-15x, 3.) Ron Rosen 250-15x, 4.) Bill Heuer 250-15x, 5.) Tom Svack 250-12x.

Jerry Faul

Camillus Sportsmen's Club

Devoe Road • P.O. Box 164 • Camillus, NY 13031
(315) 672-8331

CAMILLUS WINTER LEAGUE
1991-1992 Season

Phase One: Varmint for Score
December 1, December 15, December 29

Phase Two: Varmint for Group
January 12 and January 26
February 9 and February 23
March 1, March 15, and March 22

Entry fee is $5.00. First relay will commence firing at 10:30 am. These matches are not registered. Contact: Herb Hoverstad, 4845 Candy Lane, Manlius, New York 13104. (315) 682-5939.

INTERNATIONAL BENCHREST SHOOTERS

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1991
STRANGE DUCK INVITATIONAL

The Painted Post, New York range hosted the New York State Meter Championships, as well as the Strange Duck Invitational on July 27th and 28th.

There were 13 shooters in the Strange Duck "match within a match". The first three places in the grand agg were filled by: 1.) Bill Brawand .3524 (3rd place overall), 2.) Glenn Smith .3808 (9th place overall), and 3.) Dave Abbott .3823 (10th place overall). For the record, Bill Brawand fired a 25BMS, Glenn Smith fired a 22PPC, and Dave Abbott fired a 22PPC. There were 66 shooters in the heavy varmint class, which could indicate either of two schools of thought: 1.) There was considerable enthusiasm for "trying something different", or 2.) the PPC shooters saw it as an opportunity to beat up on the poor misguided souls entering the Strange Duck competition. Take your pick. (Hint: put your money on option #2).

Light varmint class (48 shooters) 100 meters: 1.) Marty Caratsole .3054, 2.) Don Nielson .3156 (didn't realize that California was that close to Painted Post did you?), 3.) Al Joly .3202, 4.) Bill Gammon .3204, 5.) Glenn Smith .3248. At 200 meters: 1.) Don Nielson .3199, 2.) Tim LeBarron .3669, 3.) Lee Euber .3692, 4.) Paul Beaver .3907, 5.) Paul Beaver .3907. Grand agg: 1.) Don Nielson .3177, 2.) Tim LeBarron .3695, 3.) Bill Gammon .3714, 4.) Marty Caratsole .3803, 5.) E.A. Smith .3901, 6.) Dave Abbott .3966, 7.) Glenn Smith .4028, 8.) Woody Ellison .4037, 9.) Paul Beaver .4038, 10.) Richard Baker .4070.

The Painted Post range is certainly a "200 meter" range, and this match was to be no different. The shooters who won the 200 meter agg in all three classes contested . . . went on to win the grand aggregate. And in two out of the three classes the shooter who finished second at 200 meters . . . also took second in the grand aggregate.

Heavy bench class (14 shooters) 100 meters: 1.) Don Gentner .3672, 2.) Dale Boop .3838, 3.) Bob Adamowicz .4232, 4.) Paul Burns .4310, 5.) Jerry Masker .4434. At 200 meters: 1.) Dale Boop .3409, 2.) Don Gentner .3875, 3.) Bob White .4044, 4.) Bob Adamowicz .4179, 5.) Paul Burns .4254. Grand agg: 1.) Dale Boop .3623, 2.) Don Gentner .3774, 3.) Bob Adamowicz .4205, 4.) Paul Burns .4282, 5.) Jerry Masker .4407.

Heavy varmint class (66 shooters). At 100 meters: 1.) Paul Mitchell .2568, 2.) Jerry Masker .2620, 3.) Don Nielson .2848, 4.) Jack Sutton .2932, 5.) Barry DeVliegher .3008, 6.) Clarence Rhodes .3104, 7.) Marty Caratsole .3116, 8.) Bill Brawand .3194, 9.) Don Gentner .3248, 10.) Joe Winters .3282. At 200 meters: 1.) Bill Brawand .2758, 2.) Mike Sicina .2814, 3.) Lee Euber .2885, 4.)

LIGHT VARMINT EQUIPMENT LISTS

New York State Meter Championships & Strange Duck, Painted Post Field & Stream Club, Painted Post, New York 07/27/91 to 07/28/91

Light Varmint 100 meter Top 20 Equiment List

name	caliber	action	barrel	gunsmith	stocker	scope	power	case	load	bullet	primer
M. CARATSOLE	6PPC	HALL	HART	DIXON	DIXON	LEUPOLD	36X	SAKO	27.6g GI322	EUBER 68g	F205M
D. NIELSON	6PPC	TEDDY	BROUGHTON	NIELSON	FREISIX	LEUPOLD	36X	SAKO	26.0g T32	EUBER 68g	205M
A. JOLY	6PPC	CPS	MACLENNON	DIXON	RM	LEUPOLD	36X	SAKO	2015	EUBER 68g	205M
B. GAMMON*	6PPC	SWINDLEHUR	HART	SCOT	GAMMON	LEUPOLD	36X	RUSS	28.5g H322	BRAWAND 68g	FED
G. SMITH*	6PPC	HART	MACLENNON	LOCKWOOD	E.A.SMITH	LEUPOLD	36X	SAKO	28.2g H322	SMITH 63g	REM 7-1/2
P. RYAN*	6PPC	HART	HART	BORDEN	BORDEN	LEUPOLD	36X	SAKO	27.0g H322	BRIAN? 63g	205
H. REGER*	6X40PPC	CPS	HAROLD	SWINDLEHUR	SINCLAIR	LEUPOLD	36X	SAKO	25.3g H4198	BRAWAND 63g	REM 7-1/2
J. SUTTON	6PPC	HART	HART	HART	HART	LEUPOLD	36X	SAKO	27.0g H322	RUBRIGHT 65g	FED
E. WHITE	22 PRICE	CPS	HART	WHITE	WHITE	LEUPOLD	36X	SAKO	26.8g H4895	RUBRIGHT 52g	F205M
R. BAKER	6PPC	XP100 REM	HART	FRITZ	MILLER	LEUPOLD	36X	SAKO	27.0g H322	REUBRIGH 68g	F205

HEAVY BENCH (UNLIMITED) EQUIPMENT LISTS

New York State Meter Championships & Strange Duck, Painted Post Field & Stream Club, Painted Post, New York 07/27/91 to 07/28/91

Unlimited 100 meter Top 20 Equiment List

name	caliber	action	barrel	gunsmith	stocker	scope	power	case	load	bullet	primer
D. GENTNER	6PPC	WICHITA	SHILEN	HAMMONDS	POWELL		X	SAKO	29.4g GI-322	GENTNER 65g	205
D. BOOP	6PPC	HALL	HART	WEIDNER		LEUPOLD	36X	SAKO	27.0g H322	EUBER 68g	FED
R. ADAMOWICZ	6PPC	HART	HART	R&M	R&M	LEY	48X	SAKO	4895	BRAWAND 68g	
P. BURNS	6PPC	WICHITA	HART	HAMMONDS		LEUPOLD	36X	RUSS	27.8g H322	BRAWAND 68g	205M
G. MASKER	6PPC	WICHITA	HART	G. MASKER	HALL	LYM/SIEB	40X	SAKO	29.7g N201	EUBER 68g BT	F205M
R. HORNBECK	6MM WASP	HART #4	HART	HORNBECK	HORNBECK	LEUPOLD	36X	30 AM	28.4g H322	HOLLISTR 68g	WSR
L. BRUNO	6PPC	HALL	HART	MESSNER	HALL	LEUPOLD	60X	SAKO	28.6g H322	BRUNO 66g	205
B. DEVLIEGHER	6PPC	STOLLE	LIJA	HAMMOND	HAMMOND	LEUPOLD	36X	SAKO	28.0g H322	WAT. 68g	205M
B. WHITE	6PPC	CPS	SCHNEIDER	WHITE	HALL	LEUPOLD	36X	SAKO	27.8g H322	RUBRIGHT 63g	F205
R. LEMBO	6PPC	MEYER	HART	MEYER	MEYER	LEUPOLD	36X	USA	46.0g 2015	HOLLISTR	WIN

Al Joly .3105, 5.) Don Nielson .3117, 6.) Marty Caratsole .3224, 7.) Bob Adamowicz .3267, 8.) Glenn Smith .3303, 9.) Woody Ellison .3334, 10.) Jerry Masker .3441. Grand agg: 1.) Bill Brawand .2976, 2.) Don Nielson .2983, 3.) Jerry Masker .3031, 4.) Paul Mitchell .3165, 5.) Marty Caratsole .3170, 6.) Mike Sicina .3171, 7.) Al Joly .3271, 8.) Jack Sutton .3307, 9.) Lee Euber .3322, 10.) Barry DeVliegher .3372.

Light varmint-heavy varmint 2 gun agg: 1.) Don Nielson .3080, 2.) Marty Caratsole .3487, 3.) Bill Brawand .3524, 4.) Paul Mitchell .3730, 5.) Woody Ellison .3732.

Heavy bench-heavy varmint 2 gun agg: 1.) Jerry Masker .3719, 2.) Bob Adamowicz .3832, 3.) Don Gentner .3856, 4.) Lester Bruno .4253, 5.) Barry DeVliegher .4316.

HEAVY VARMINT EQUIPMENT LISTS

New York State Meter Championships & Strange Duck, Painted Post Field & Stream Club, Painted Post, New York 07/27/91 to 07/28/91

Heavy Varmint 100 meter Top 20 Equiment List

name	caliber	action	barrel	gunsmith	stocker	scope	power	case	load	bullet	primer
P. MITCHELL	6PPC	HALL	MACLENNAN	DIXON	WEIDER	LEUPOLD	36X	220R	27.5g H322	HOLLISTR 68g	205
G. MASKER	6PPC	WICHITA	HART	MASKER	MASKER	PREMIER	40X	SAKO	27.5g T32	HOLLISTR 68g	WIN
D. NIELSON	6PPC	TEDDY	HART	NIELSON	FREI-SIX	LEUPOLD	36X	SAKO	26.0g T-32	EUBER 68g	205M
J. SUTTON	6PPC	HART	HART	HART	HART	LEUPOLD	36X	SAKO	27.0g H322	RUBRIGHT 65g	FED
B. DEVLIEGHER	6PPC	STOLLE	HART	MASKER	SIX	PREM	45X	SAKO	28.0g H322	EUBER 68g	205M
C. RHODES	6PPC	HALL	HART	HAMMONDS	HAMMONDS	B&L	36X	SAKO	27.4g T32	FOWLER 66g FB	REM 7-1/2
M. CARATSOLE	6PPC	HALL B	MACLENNAN	DIXON	EUBER	LEUPOLD	36X	SAKO	27.2g H322	EUBER 68g	F205M
B. BRAWAND*	25BMS	XP100	MACLENNAN	SWINDLEHUR	ADOMOVIZ	LEUPOLD	40X	BR	30.0g 3032	BRAWAND 70g	205
D. GENTNER	6PPC	STOLLE	CHAMLYN	MILLER	GENTNER		X	SAKO	28.5g T322	GENTNER 64g	205
J. WINTERS	6PPC	SHILEN	HART	MASKER	MASKER	LYMAN	25X	SAKO	28.0g H322	HOLISTER	REM 7-1/2

PORTVILLE WINTER LEAGUE

The 1990-1991 Portville Benchrest Winter League is over and with much success. We did have one misfortune happen to us this year. We had the passing of Nate Cussins from Marienville, Pa. Nate passed away on the 25th of December. He had been a bullet maker and a shooter for a number of years. The passing of Nate was a loss to all of us. He will be greatly missed.

Our final week finished us up with 35 competitors. Anyone interested in shooting feel free to come. Here are the best 6 weeks standings.

100 yards agg.: 1.) Jim Oliver .2736, 2.) Dick Lockwood .2766, 3.) Paul Beaver .2788, 4.) E.A. Smith .2865, 5.) Mike Gamble .3024. Smallest Agg. - E.A. Smith .2110. Smallest Group - Mike Rosenswie .085.

200 yards agg.: 1.) Dick Lockwood .3433, 2.) Al Skiver .3476, 3.) Paul Beaver .3785, 4.) Jim Oliver .3812, 5.) Bill Brawand .3850. Smallest agg. - Al Skiver .2167. Smallest Group - E.A. Smith .256.

Grand agg.: 1.) Dick Lockwood .3092, 2.) Al Skiver .3306. Smallest Grand - Al Skiver .2304.

Our winter league is about to get under way this year. Our range has been revamped and I feel it will be pleasing to all. The schedule is as follows:

Oct. 27
Nov. 10
Nov. 24
Dec. 8
Dec. 22
Jan. 5
Jan. 19
Feb. 2
Feb. 16
Mar. 1
Mar. 15
Mar. 29

Matches will begin at 10:00 and 100 & 200 yards will be shot. Any questions call Al Skiver at 716-933-8765. Hope to see you.

EQUIPMENT LIST

Name	Caliber	Action	Barrel	Gunsmith	Scope	Load	Bullet
D. Lockwood	6BR-Short	CPS	McClennan	Self	Leu	25.7/4198	Self
J. Oliver	6PPC	Stolle	Hart		Leu	26/H322	Hollister
M. Gamble	6PPC			Lockwood		26/T322	Lockwood
P. Beaver	6PPC		McMillan	Lockwood	Leu	28/322	DeMonstoy
B. Brawand	6PPC	Swindlehurst	McClennon	Self		3032Scott	Self
E.A. Smith	6PPC			Self			Self
A. Skiver	6PPC	Rem	Hart	Self	Leu	28/322	DeMonstoy

CAPITOL CITY

The September 1st match at the Augusta range had temperatures down in the 30 degree range in the morning. Although the match report says nothing about it, we understand that they had to kick awake a couple of polar bears who were dozing on benches 1 and 2. As this is written (early October) the Capitol City range is probably snowed in.

Hunter class (5 shooters): 1.) George Hogan 249-11x, 2.) Parker Hills 245-9x, 3.) Blaine Johnson 241-5x.

Varmint hunter class (4 shooters): 1.) Joe Gilbert 248-13x, 2.) Dwight Furrow 246-6x, 3.) Parker Hills 246-6x.

Varmint for score (12 shooters): 1.) Tom Peria 250-18x, 2.) Jack Sutton 250-14x, 3.) Dwight Furrow 250-9x, 4.) Blaine Johnson 249-15x, 5.) Al Joly 249-12x.

INTERNATIONAL BENCHREST SHOOTERS 1991 ELECTION ANNOUNCEMENT

Ballots for the election of the Second Vice President, Executive Secretary and Treasurer of IBS will be mailed to the homes of voting members in late November. The ballots must be returned to the Recording Secretary no later than December 31, 1991.

The candidates for offices are as follows:

SECOND VICE-PRESIDENT
PAUL RYAN

SECRETARY
GARY LONG

TREASURER
BRIAN RUBRIGHT

1992 ANNUAL MEETING AGENDA ITEM

The matter that we would like to have discussed at the annual meeting is shooting outside the border on your own target. We feel that the penalty for shooting outside the border should not be greater than shooting on another competitor's target a bench or so away. We would like to see the penalty changed to one quarter of an inch for each 100 yards of range.

Allen Skiver

Agenda item signed by 49 IBS members.

THE SCORE SHEET

I received a memo from the Score Shooter of the Year statistician regarding ranges forwarding their match reports. When there is a long delay in receiving the match reports, the statistician cannot give the competitors an accurate update of the standings for the year at the matches. Although IBS mandates that match reports must be forwarded to them within 4 weeks, Bill has waited 6 to 8 weeks. It is not necessary to forward a complete type match report. A photo copy of the score sheets, Match 5 of the computer printout, or a list of competitors and their scores are all that is needed.

Congratulations to **Salisbury Rod and Gun Club** on holding a successful First Maryland State Score Championship. Many good comments have been received. One of the participants at the Maryland States took notice that the stationary backers were extended outside the left and right hand side of the target frames. After firing a nice Varmint Class match of 50-5X, he remembered that in his truck was a Rem. 788 in a .222 caliber that he was working on. He quickly obtained said equipment and decided to bore sight it and check its zero on the portion of the stationary backer hanging out to his left side. One wonders what he bore sighted it at as his first shot went on his record target and gave him a nice match score of 40-4X. If anyone sees **Ted Parreco,** offer him the use of your bore sighter and tell him it's hard to improve a 50-5X.

Many of you may not know that the reason you can leave the range so quickly after many matches is because **Ted Parreco** took the time and initiative to write a computer program for Score Shooting and Group Shooting. Ted also provides the computer, printer, paper, etc. necessary to run the program. We all owe him a big thank you!

A workshop will be held on Scoring Procedure and Refereeing within Score Shooting at the IBS Winter Meeting. We hope this workshop will help and answer any questions you may have. This workshop is tentative to available time at the meeting.

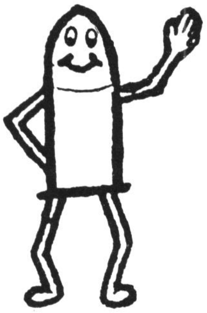
Scheduling of matches is and always has been a real difficult job. This past year some ranges dropped shoots, added shoots, rescheduled shoots, and changed scheduled shoots. When these changes were made, no consideration was given to the distance between the ranges. Therefore, both ranges suffered in attendance. Scheduling is always done at the IBS Winter Meeting. It would benefit all if the range directors would either attend the meeting with their tentative dates or forward a copy of these dates to the match scheduling chairman prior to the meeting. If any conflicts should arise, they then can be handled before the season begins. IBS should firmly maintain these dates.

B.B. has received some inside info about the Score Shooter of the Year awards and it looks like a real horse race (Would the editor care to place some bets?). At the same time I heard that the Stats for the year are mind boggling. Remember there are two awards this year, Score Shooter of the Year and Varmint Score Shooter of the Year, so save extra film for picture taking.

At this time I (B.B.) would like to thank all the range directors, competitors, volunteer target crews, and anyone else for providing such interesting material for this column. I would especially like to thank Dave Brennan, Ye Ole Editor, for allowing me to expound on Score Shooting through this column. It has been fun and with his tolerance I will see you next season. (Editor: You may consider the tolerance granted). HAPPY HOLIDAYS!

May your X count be high,

B.B.



TARGETS

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IBS-H/1	100 YD Hunter—Black 12x19	250	14	10.50
IBS-H/2	200 YD Hunter—Black 13x21	250	15	10.50
IBS-H/3	300 YD Hunter—Black 13x26	250	22	25.50

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1991 IBS SCORE SHOOTING SCHEDULE

Dec. 29 — CENTRAL JERSEY RIFLE & PISTOL CLUB, Jackson, N.J. — 100 yard H-VH-VFS, 12:00 noon (NEW MATCH)

ORIGINAL PENNSYLVANIA 1000 YARD BENCHREST CLUB INC.

Newsletter 1991

August 4, 1991 Newsletter # 6

Match #6

Winning Equipment

9 Relays 81 Shooters

Name	Group	Cal.	BBl.	Scope	Gunsmith
1. Bill Hagerman	8.687	308 Baer	Hart	Leupold	Bruce Baer
2. Larry Mitchell	7.531	30-378	Hart	Unertl	Howard Wolfe
3. Gene Graybill	10.625	308 Sup.	Hart	Unertl	Gene Graybill
4. Ed Mackert	10.187	308 Baer	Hart	Unertl	Bruce Baer
5. Les Hagerman	7.281	308 Baer	Hart	Leupold	Bruce Baer
6. Walt Bryan	12.281	300 BN	Krieger	Unertl	John Stoppa
7. Harold Rice	8.531	308 Sup.	Hart	Unertl	Gene Graybill
8. Bruce Baer	10.125	308 Baer	Oberm.	Unertl	Bruce Baer
9. John Bledsloe	10.125	300 BN	Krieger	Unertl	John Stoppa

Name	Score	Cal.	BBl.	Scope	Gunsmith
1. Bob Moriarity	89	30.378	Wiseman	B & L	Howard Wolfe
2. Shirley Graybill	98 Blk	308 Sup.	Hart	Unertl	Gene Graybill
3. Bill Wierick	89	284 Baer	Hart	Unertl	Bruce Baer
4. Carol Cassel	87	308 Baer	Oberm.	Unertl	Bruce Baer
5. Tom Petrzala	91	7MM	Hart	Unertl	Unknown
6. Brent Staub	90	30 BGS, SR.	Oberm	Leupold	Bruce Baer
7. Steve Shelp	91	308 Baer	Hart	Unertl	K. Klierendorst
8. Ted Morgan	90	308 Baer	Oberm.	Redfield	Bruce Baer
9. Dick Lauver	81	300 Wby.	Douglas	Tasco	Howard Wolfe

Shoot Off Winner Group

BILL HAGERMAN 8.937

Smallest Group Fired

LES HAGERMAN 7.281

Closest to Center

WALT BRYAN .618

Shoot Off Winner Score

BRENT STAUB 85

High Score of the Day

SHIRLEY GRAYBILL 98 BLK

ORIGINAL PENNSYLVANIA 1000 YARD BENCHREST CLUB INC.

Newsletter 1991

August 22, 1991 Newsletter # 7

Match #7

Winning Equipment

9 Relays 85 Shooters

Name	Group	Cal.	BBl.	Scope	Gunsmith
1. Linda Hagerman	Blk 8.000	308 Baer	Oberm	Leupold	Bruce Baer
2. Wayne Eveler	7.593	308 Baer	Hart	Leupold	Bruce Baer
3. Allen Miller	Blk 8.750	308 Win	Hart	Unertl	Howard Wolfe
4. Harold Rice	7.875	308 Sup.	Hart	Unertl	Gene Graybill
5. Lowell Amand	7.875	30 Mag	Hart	B & L	Gene Graybill
6. John Bledsoe	6.687	30 BN	Krieger	Unertl	John Stoppa
7. Joe Saltalamachia, Sr.	9.868	308 Baer	Oberm	Unertl	Bruce Baer
8. Sid Goodling	10.125	30 Goodling	Hart	Leupold	Sid Goodling
9. Rick Loy	Blk 9.375	300 Win	Hart	Unertl	Bruce Baer

Name	Score	Cal.	BBl.	Scope	Gunsmith
1. Steve Warner	88	308 Baer	Oberm.	Leupold	Bruce Baer
2. Bob Moriarity	98 Blk	30-378	Wiseman	B & L	Howard Wolfe
3. Shirley Graybill	97 Blk	308 Super	Hart	Unertl	Gene Graybill
4. Wayne Linsenbach	96	308 Baer	Hart	Unertl	Bruce Baer
5. John Smith	96	30 BN	Krieger	Unertl	John Stoppa
6. Les Hagerman	96	308 Baer	Hart	Redfield	Bruce Baer
7. Ed Mackert	90	308 Baer	Rem.	Unertl	Bruce Baer
8. Bill Majer	94	308 Super	Hart	Unertl	Gene Graybill
9. Tom Leighton	93	30-378	Lilja	B & L	Tom Leighton

Shoot Off Winner Group

LOWELL AMAND 11.062

Smallest Group Fired

JOHN BLEDSOE 6.687

Closest to Center

WAYNE LINSENBACH 0.375

Shoot Off Winner Score

LES HAGERMAN 93

High Score of the Day

BOB MORIARITY 98

IBS ANNUAL MEMBERSHIP MEETING

January 10 & 11, 1992

SHADOWBROOK RESORT
TUNKHANNOCK, PA.

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AGENDA:
Friday Evening - January 10, 1992

Past Presidents' Reception in the Sullivan Room. Soda, beer, coffee and light snacks will be provided. This will be an informal affair to honor the past leaders of the IBS. Please feel free to bring any new or not so new benchrest items to show your friends. 7:30 until ?????

Saturday - January 11

Membership and Board of Directors Meeting in Mainstream Room

Open Membership Meeting
  Welcome and special announcements
  Committee Reports
  Awarding of score and group shooter of the year awards
  Financial Report
  Adjourn Membership Meeting

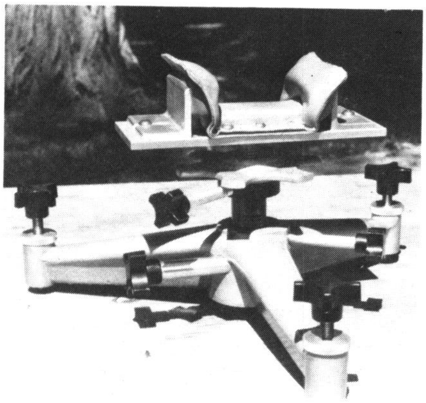
Board of Directors Meeting
(Note: it is very important that each club have a representative at this meeting.)
  Set dates for the 1992 championship matches
  1992 score and group shooting schedules.
Reconvene membership meeting
  Old business
  New business
Seminars (we will have at least one seminar of interest to new shooters and old)
  Adjourn

Breaks will be taken in the morning and afternoon with coffee and donuts provided, lunch on your own. All manufacturers and suppliers of benchrest equipment are invited to set up displays on Friday night and during the breaks on Saturday.

The Shadowbrook has a raquetball facility, Nautilus room, sauna, bowling alley, dairy bar, dance floor with disco lighting and a restaurant for guest enjoyment. Phone 717-836-2151

The new

Bald Eagle Front Rest



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